

TOSHIBA

FILE NO. 333-9801
SUPPLEMENT

SERVICE MANUAL

3LCD DATA PROJECTOR

TLP510A, TLP511A

TLP510Z, TLP511Z

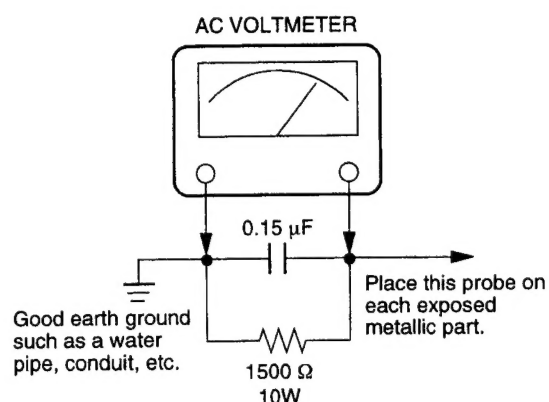
— SUMMARY —

This service manual provides for the additional technical information of the service manuals
File No. 330-9706 for TLP510U, TLP511U, TLP510E, TLP511E.
For other technical information, please refer to the original service manuals.

SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this projector. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
3. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V (TLP510A, TLP511A)/240V (TLP510Z, TLP511Z) AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 Ω per volt or more sensitivity in the following manner: Connect a 1500 Ω 10W resistor, paralleled by a 0.15 μ F, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 Ω resistor and 0.15 μ F capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 5.25V(rms). This corresponds to 3.5 mA(AC). Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

ULTRAVIOLET DANGER IN SERVICE MODE

Eye damage may result from directly viewing the light produced by the lamp used in this product. Always turn off lamp before opening this cover. Ultraviolet radiation eye protection required during servicing.

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- For descriptions of other circuits except for drive circuit, refer to the technical training manual (File No. 336-9707) for TLP510U, TLP511U, TLP510E, TLP511E.
- For adjustments of camera section, refer to the service manual (File No. 330-9706) for TLP510U, TLP511U, TLP510E, TLP511E.

SECTION 2 SERVICING DIAGRAMS

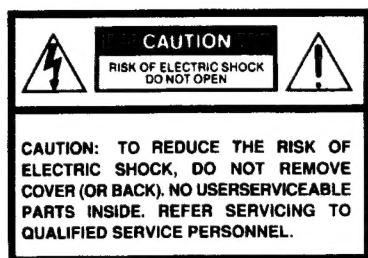
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- For the circuit diagrams and PC boards not appeared in this manual (Fan control, inverter, camera, etc.), refer to the service manual (File No. 330-9706) for TLP510U, TLP511U, TLP510E, TLP511E.

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SAFETY PRECAUTIONS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

<TLP510A, TLP511A>

FCC Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiates radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING: Changes or modifications made to this equipment, not expressly approved by Toshiba, or parties authorized by Toshiba, could void the user's authority to operate the equipment.

Notice: This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

IMPORTANT PRECAUTIONS

Save Original Packing Materials

The original shipping carton and packing materials will come in handy if you ever have to ship your LCD projector. For maximum protection, repack the set as it was originally packed at the factory.

Avoid Volatile Liquid

Do not use volatile liquids, such as an insect spray, near the unit.
Do not leave rubber or plastic products touching the unit for a long time. They will mar the finish.

Moisture Condensation

Never operate this unit immediately after moving it from a cold location to a warm location. When the unit is exposed to such a change in temperature, moisture may condense on the crucial internal parts. To prevent the unit from possible damage, do not use the unit for at least 2 hours when there is an extreme or sudden change in temperature.

In the spaces provided below, record the Model and Serial No. located at the rear of your LCD projector.

Model No. _____ Serial No. _____

Retain this information for future reference.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS GIVEN IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. Read owner's manual

After unpacking this product, read the owner's manual carefully, and follow all the operating and other instructions.



2. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.



3. Source of Light

Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes or sight.



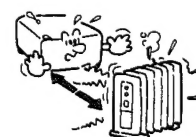
4. Ventilation

Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.



5. Heat

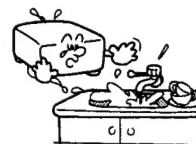
The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



IMPORTANT SAFETY INSTRUCTIONS

6. Water and Moisture

Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.



7. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.



8. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.



9. Overloading

Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a fire or electric shock.



10. Lightning

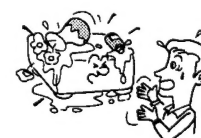
For added protection for this product during storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.

This will prevent damage to the product due to lightning and power-line surges.



11. Object and Liquid Entry

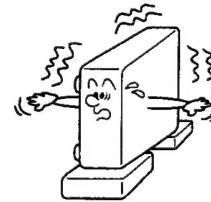
Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.



12. Do not place the product vertically

Do not use the product in the upright position to project the pictures at the ceiling, or any other vertical positions.

It may fall down and dangerous.



13. Stack inhibited

Do not stack other equipment on this product or do not place this product on the other equipment.

Top and bottom plates of this product develops heat and may give some undesirable damage to other unit.



14. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

15. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



16. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

17. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



18. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

(Replacement of the lamp only should be made by users.)

19. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.



20. Do not get your hands between the camera arm and the main unit when setting the camera arm back in its original position.

To avoid injury, be careful not to get your hands caught when setting the camera arm back in its original position. Families with children should be particularly careful.



21. Do not carry by the camera arm.

Do not carry the projector by the camera arm. Doing so can result in damage or injury.



22. Do not leave documents on the unit for long periods of time while using the document imaging function.

Do not leave texts, papers or other documents for projection on the unit for long periods of time. The heat could erase the letters on a thermal paper.

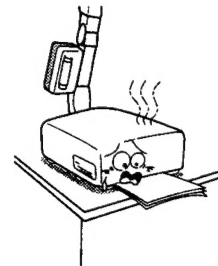


23. Before replacing the fluorescent light, turn off the power and wait at least one hour for the fluorescent light to cool down.

The fluorescent light gets hot, so handle it with care. Failure to do so may result in burns or other injuries.

24. Do not leave documents in the bottom of the projector.

Documents can block the air intake holes, making the inside of the projector heat up and causing breakdowns.



25. Do not move the projector while the arm is still erect.

Always store the arm back in position when moving the projector. Otherwise injury or damage may result.



26. Camera section is not locked. Do not hold the camera cover and camera unit when carrying out, etc.

Danger such as dropping, or cause of failure and injury may result.



SECTION 1

GENERAL DESCRIPTIONS/ ADJUSTMENT PROCEDURES

1. DRIVE CIRCUIT

The drive circuit consists of a gamma process IC (Q701), alternation, sample and hold IC (Q401, Q402, Q501, Q502, Q601, Q602), timing buffer (Q901, Q902), 8 bit DA (Q900) and a power supply (Q950, Q951, Q952).

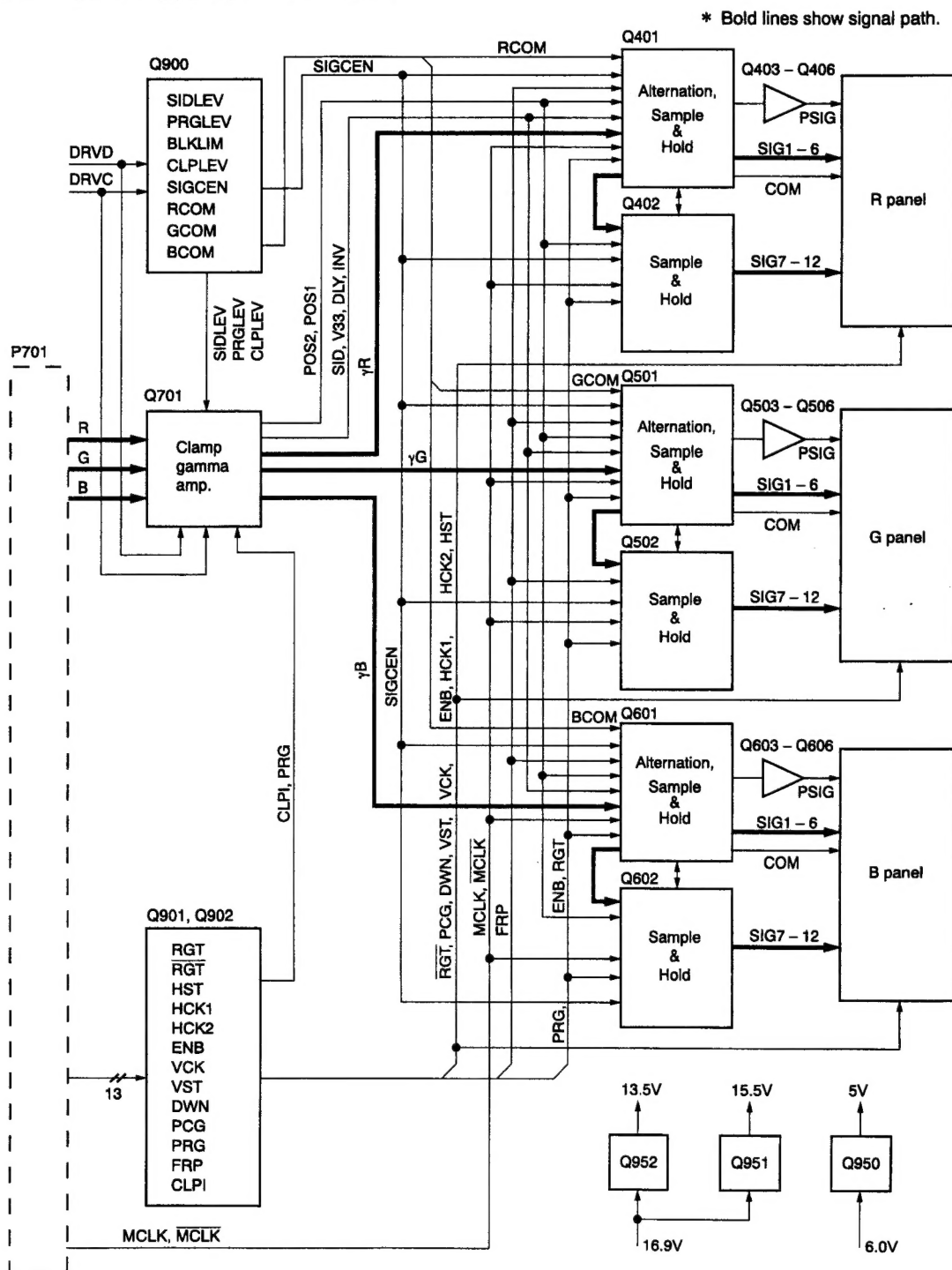


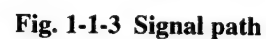
Fig. 1-1-1 Block diagram of drive circuit

Fig. 1-1-2 shows an internal block diagram of the gamma process IC Q701 CXA2111R.



The IC features:

- **Gamma:** R, G, B separate adjustment type and allows adjustments of gain and position at 3 points (one white side, two black side).
- **Amplifier:** Separate adjustment for R, G, B gains and bias voltages.
- **f response:** 100 MHz
- **Through rate:** 375
- The adjustments are carried out through I²C.



1-2. Alternation, Sample & Hold Process IC CXA2112R (Q401, Q402, Q501, Q502, Q601, Q602)

Fig. 1-1-4 shows an internal block diagram of the IC.

The CXA2112R has functions such as a line inversion amplifier, demultiplexer (6 output), output buffers, timing generator, etc.

Features are:

- High speed signal process for XGA signal (dot clock is 100 MHz).
- Lower output deviation due to an output offset cancel circuit built-in.

- No group delay in inverting and non inverting.
- Built-in timing generator with ECL configuration.
- Dot clock phase adjustment function.
- Built-in VCOM voltage generation circuit.
- Built-in precharge pulse waveform generation circuit.

A video signal entered pin 47 of Q401 (Q501, Q601) is amplified by about 2.7 times with an INVERT-AMP and developed from pin 46. The output is fed to pin 45 of Q401 and pin 45 of Q402 (Q502, Q602) and developed in 6 layers by each IC.

Q401 (Q501, Q601) handles SIG1 – SIG6 and Q402 (Q502, Q602) handles SIG7 – SIG12.

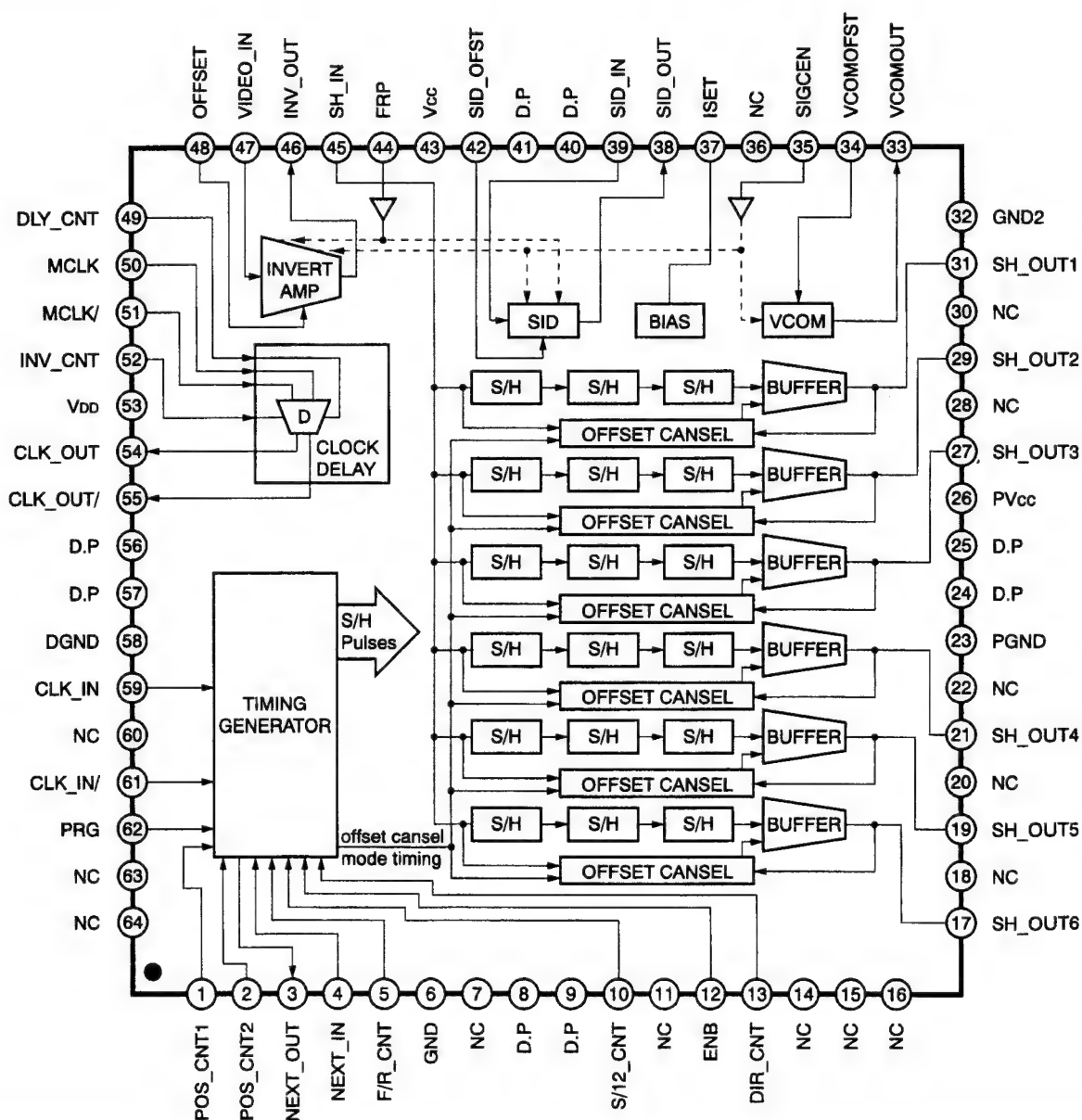


Fig. 1-1-4 Block diagram of CXA2112R

1-3. Timing Chart

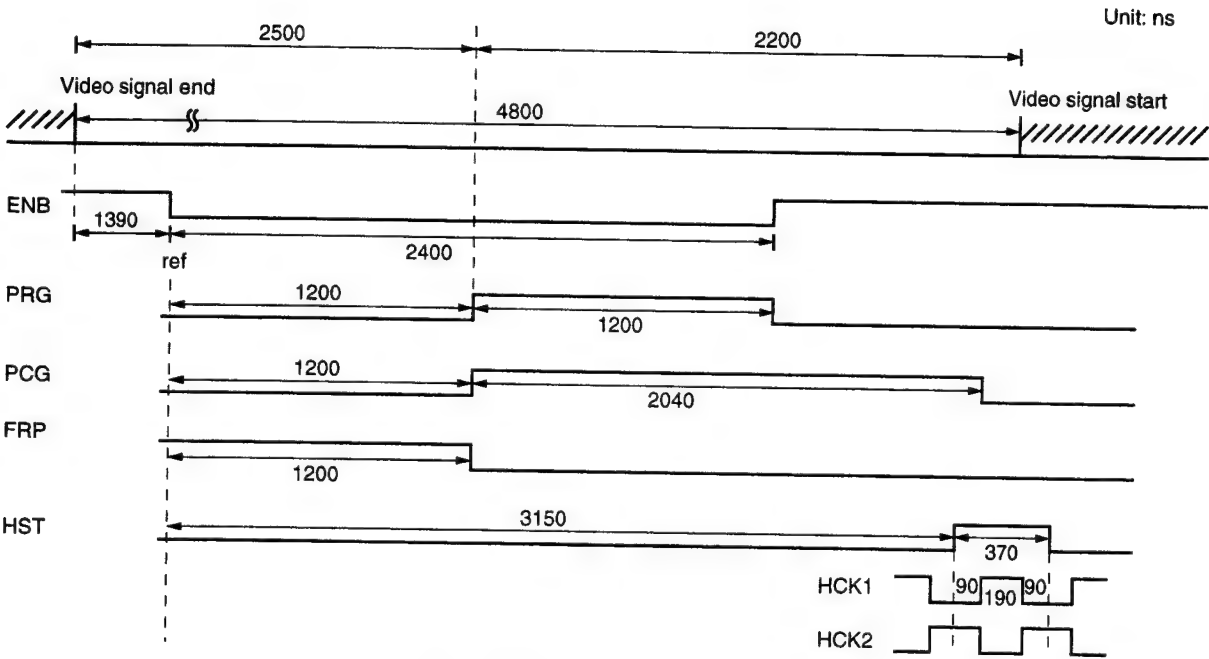


Fig. 1-1-5 Horizontal timing chart

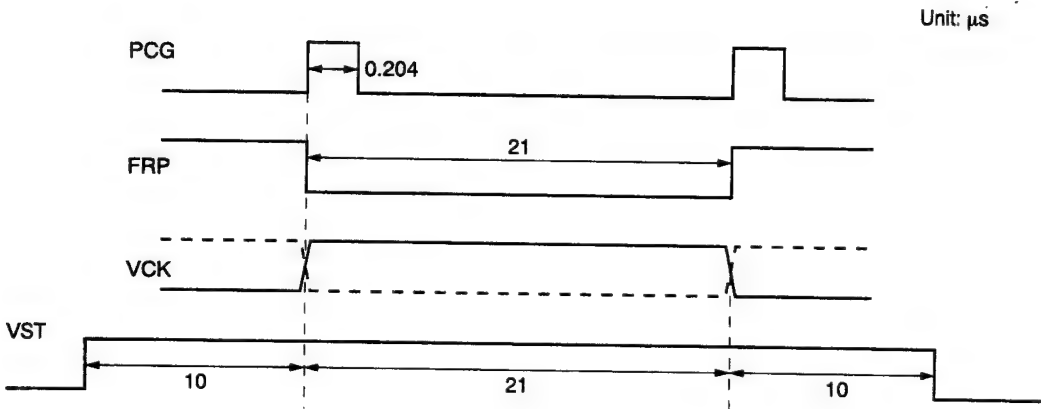


Fig. 1-1-6 Vertical timing chart

1-4. LCD Panel

1-4-1. Outline

The LCD panel is an active matrix panel using a super thin film multi-crystal silicone transistors with a driver built-in 3.3 cm in diagonal length.

The LCD panel assures a high quality pictures with an advanced on chip black matrix, crosstalk free circuit and ghost free circuit employed.

It also contains a poly-silicone TFT high speed scanner and up-down, left-right inversion functions. Moreover, a 5V system interface circuit employed allows a low voltage operation for the timing and signal control.

1-4-2. Features

- Display dot number 786,000 dots 3.3 cm diagonal (1.3" type)
- High transparent ratio 18% (nominal)
- Crosstalk free circuit and ghost free circuit built-in.
- High contrast ratio with normally white mode employed, 250 (nominal)
- H, V drivers built-in (with input level conversion circuit, 5V operation available)
- Up-down, left-right inversion display function

1-4-3. Device Structure

- Dot number 1024 (H) x 768 (V) = 786,432
- Active matrix panel with driver, using multi-crystal silicone transistors.

Table 1-1-1 Terminal description

Pin No.	Name	Description
1	PSIG	Uniformity improvement signal input terminal.
2	VssGR	Dedicated GND terminal for right V gate.
3	VSIG1	Video signal 1 input terminal for panel.
4	VSIG2	Video signal 2 input terminal for panel.
5	VSIG3	Video signal 3 input terminal for panel.
6	VSIG4	Video signal 4 input terminal for panel.
7	VSIG5	Video signal 5 input terminal for panel.
8	VSIG6	Video signal 6 input terminal for panel.
9	VSIG7	Video signal 7 input terminal for panel.
10	VSIG8	Video signal 8 input terminal for panel.
11	VSIG9	Video signal 9 input terminal for panel.
12	VSIG10	Video signal 10 input terminal for panel.
13	VSIG11	Video signal 11 input terminal for panel.
14	VSIG12	Video signal 12 input terminal for panel.
15	HVDD	H driver power supply input terminal.
16	RGT	H shift register drive direction input terminal. (H: normal direction, L: reverse direction)
17	HST	Start pulse input terminal for H shift register drive.
18	HCK2	Clock input terminal 2 for H shift register drive.
19	HCK1	Clock input terminal 1 for H shift register drive.
20	Vss	H, V drivers GND terminal.
21	VssGL	Dedicated GND terminal for left V gate.
22	BLK	PC98 display panel input terminal.
23	ENB	Enable input terminal for gate selection pulse.
24	VCK	Clock input terminal for V shift register drive.
25	VST	Start pulse input terminal for V shift register drive.
26	DWN	V shift register drive direction input terminal. (H: normal direction, L: reverse direction)
27	HB	S-XGA display area switching input terminal.
28	VB	PC98 display area switching input terminal.
29	PCG	Uniformity improvement pulse input terminal.
30	VVDD	V driver power supply input terminal.
31	COM	Panel opposite voltage input terminal.
32	TEST	Keep to open as test terminal.

2. SUPPLEMENT FOR ELECTRICAL CIRCUIT/OPTICAL SYSTEM (LCD PANEL) ADJUSTMENT

< Service jig >

- Extension cable kit: 23505407
- Focus adjust jig: 23974761



Fig. 1-2-1

When using the extension cable kit (23505407), you will perform the adjustment on PC boards removing the PC boards from the unit.

1. Remove the PC boards (Video/audio, digital and drive) from the unit.
2. Connect PC boards each other again.
3. Connect the unit and PC boards removed using the extension cable.

Connection of each extension cable

(1) Power unit – Drive board (PF001)	4P
(2) Power unit – Video board (PV008)	7P
(3) Power unit – Digital board (PX007)	5P
(4) Power unit – Drive board (PL002)	4P
(5) Intake fan – Drive board (PF004)	5P
(6) Exhaust fan – Drive board (PF003)	3P
(7) Lamp power unit – Drive board (PL009)	3P
(8) Thermal lead SW	2P
(9) LCD panel – Drive board (P401)	32P
(10) LCD panel – Drive board (P401)	32P
(11) LCD panel – Drive board (P401)	32P

This connector is open

- | | |
|-----------|----------------------------|
| (1) PL001 | Drive board |
| (2) PL003 | Drive board – F. REM board |
| (3) PF002 | Drive board – F. REM board |

3. ELECTRICAL ADJUSTMENT

< Test Equipments and Test Jigs >

- Oscilloscope
- Digital voltmeter
- Standard white board (WS-2)
- Color luminance meter (BM-5)
- Adjustment software TLP521.EXE

< Input Signal List (for use of ROM:TLP511.EXE) >

- Stairstep signal (RGB)
- Gray scale signal (Video/RGB)
- White 50% signal (RGB)
- SMPTE signal (RGB)
- Common voltage adjustment signal XGA (RGB)

< Connection and Setting of Computer >

(1) Connection of computer

- 1) Connect a computer as shown in Fig. 4-0-1, and then perform the adjustment using the adjustment software TLP521.EXE. (When using a drive C, type C: ¥TLP521.EXE and press enter key.)

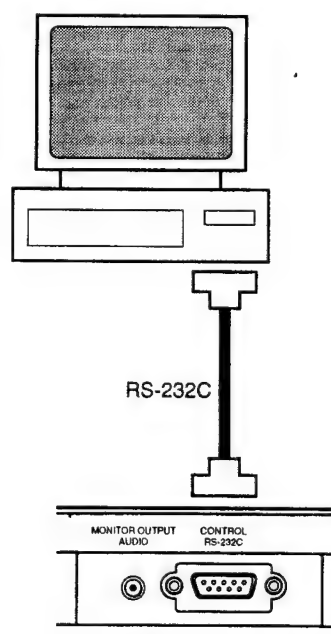


Fig. 1-3-1

(2) Default status setting

- 1) Connect computer and boot adjustment software.
- 2) Set contrast & brightness at the default.
(Refer to owner's manual)

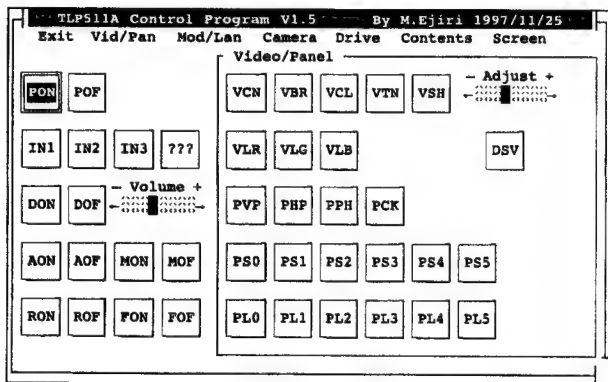


Fig. 1-3-2 Display of computer monitor
(Vid/Pan menu: at starting period)

(3) Adjustment method

- 1) Adjustment is carried out by using Drive menu on the computer monitor.

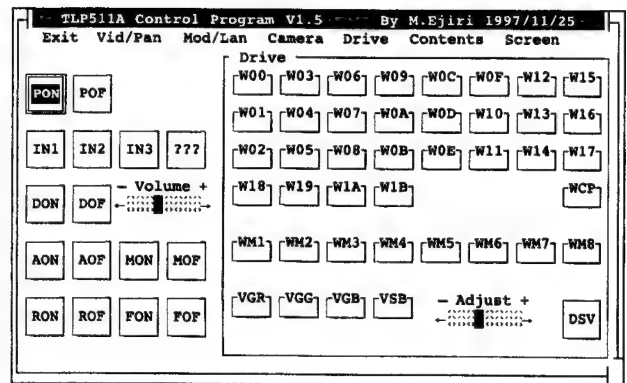


Fig. 1-3-3 Display of computer monitor
(Drive menu: for adjustment)

- 2) ☐ stands for an Drive menu key.
After clicked ☐ shown in adjustment items, click the ☐ side and ☐ side of ☐ alternately to adjust to a specified value.
- 3) Before proceeding to each adjustment click in ☐ Drive menu to set RGB input. When making "1-3. Video signal input adjustment" click ☐ to set video input.

< Adjustment Locations and Adjustment Items >

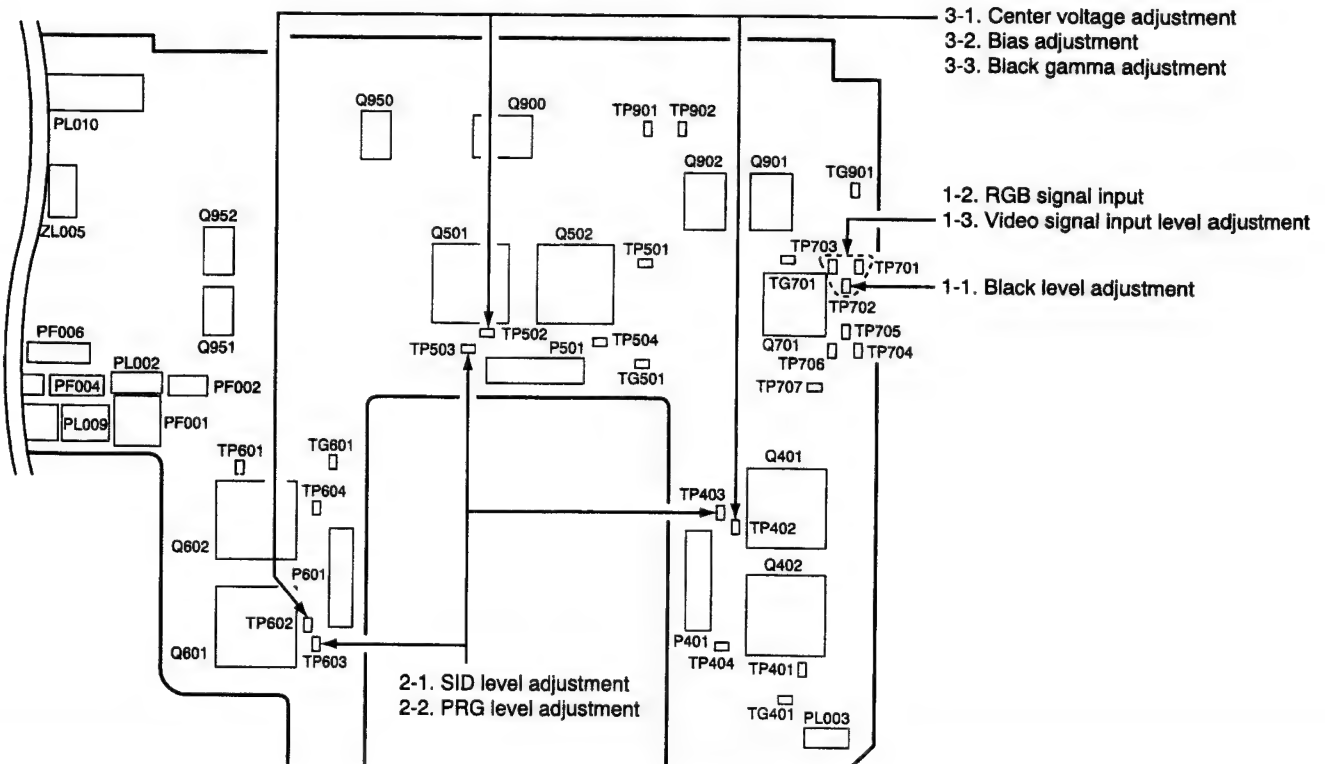


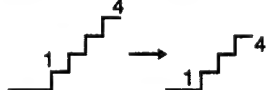



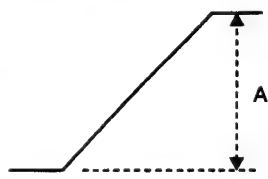



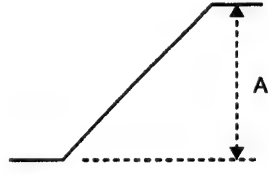

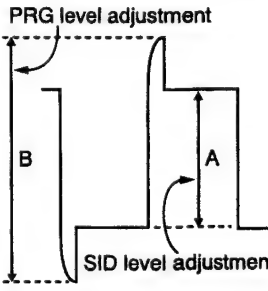

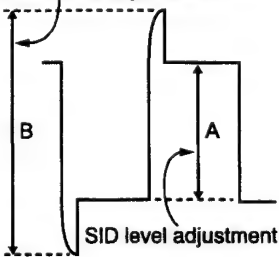

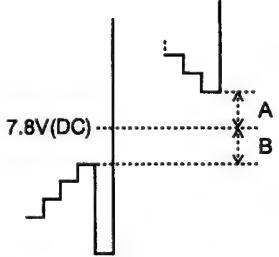



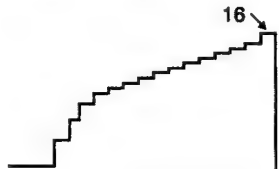



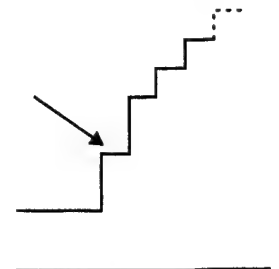




















Fig. 1-3-4 Drive PC board (Top side)

Table 1-3-1

Adjust Items	Input Signal	Test Equipment	Test Point	Adjust Key	Adjust Value	Note
1. Input level adjustment 1-1. Black level adjustment	Stairstep signal (RGB)	Oscilloscope	TP702 (G)		<ul style="list-style-type: none"> See the illustration right. 	<ul style="list-style-type: none"> Match the pedestal level to the black signal (1st step) using  in the adjust menu.  <p>Trigger the oscilloscope at TP901. (H sync)</p>
1-2. RGB signal input adjustment	Gray scale signal (RGB)	Oscilloscope	TP701 (R) TP702 (G) TP703 (B)	  	$A = 1.20V \pm 20 \text{ mV}$ $A = 1.20V \pm 20 \text{ mV}$ $A = 1.33V \pm 20 \text{ mV}$	 <p>Trigger the oscilloscope at TP901. (H sync)</p>
1-3. Video signal input level adjustment	Gray scale signal (video)	Oscilloscope	TP701 (R) TP702 (G) TP703 (B)	  	$A = 1.10V \pm 20 \text{ mV}$ $A = 1.20V \pm 20 \text{ mV}$ $A = 1.28V \pm 20 \text{ mV}$	 <p>Trigger the oscilloscope at TP901. (H sync)</p>
2. PSIG adjustment 2-1. SID level adjustment	Gray scale signal (RGB)	Oscilloscope	TP403 (R) (TP503 (G)) (TP603 (B))		$A = 3.8V \pm 50 \text{ mV}$	<ul style="list-style-type: none"> Set the amplitude of A to $3.8V \pm 50 \text{ mV}$ (Rch) and confirm Gch and Bch level. 

Adjust Items	Input Signal	Test Equipment	Test Point	Adjust Key	Adjust Value	Note
2-2. PRG level adjustment	Gray scale signal (RGB)	Oscilloscope	TP403 (R) (TP503 (G)) (TP603 (B))		$B = 9V \pm 50 \text{ mV}$	<ul style="list-style-type: none"> Set the amplitude of B to $9V \pm 50 \text{ mV}$ (Rch) and confirm G ch and Bch level. <p>PRG level adjustment</p> 
3. Gamma adjustment 3-1. Center voltage adjustment	16 stairstep signal (RGB)	Oscilloscope	TP402 (R) TP502 (G) TP602 (B)		$A = B$	
3-2. Bias adjustment	16 stairstep signal (RGB)	Oscilloscope	TP402 (R) TP502 (G) TP602 (B)	  	$6.90V \pm 20 \text{ mV}$ $6.90V \pm 20 \text{ mV}$ $6.94V \pm 20 \text{ mV}$	<ul style="list-style-type: none"> Adjust the 16th step as shown in the figure.  <p>Trigger the oscilloscope at TP901. (H sync)</p>
3-3. Black gamma adjustment	16 stairstep signal (RGB)	Oscilloscope	TP402 (R) TP502 (G) TP602 (B)	  	$4.50V \pm 60 \text{ mV}$ $4.50V \pm 60 \text{ mV}$ $4.16V \pm 60 \text{ mV}$	<ul style="list-style-type: none"> Adjust the 2nd step as shown in the figure.  <p>Trigger the oscilloscope at TP901. (H sync)</p>
4. Ghost adjustment	SMPTE signal (RGB)	Oscilloscope	Screen		Ghost: minimum	<ul style="list-style-type: none"> After adjustment, select  in Vid/Pan menu and adjust the picture position in horizontal direction.

Adjust Items	Input Signal	Test Equip-ment	Test Point	Adjust Key	Adjust Value	Note
5. COM adjustment	COM adjust signal (RGB)	Oscillo-scope	Screen (R) Screen (G) Screen (B)	  	(Approx. 7.4V (TP404)) (Approx. 7.4V (TP504)) (Approx. 7.4V (TP604))	• Adjust flicker to minimum.
6. White balance adjustment	White 50% signal (RGB)	<ul style="list-style-type: none"> • Standard white board (WS-2) • Color luminance meter (BM-5) 		  		<ol style="list-style-type: none"> 1. Place the unit in a dark room and feed white 50% signal. 2. Attach standard white board WS-2 on the center of screen or hang the board so that it touches the screen. 3. Set color luminance meter BM-5 warmed-up more than 30 min. to measure color temperature on WS-2. 4. After confirming that the luminance is set within the range of 65 - 75 cd/mm; <ul style="list-style-type: none"> • When luminance is low, adjust ,  and  to decrease the value in the same number of steps. • When luminance is high, adjust ,  and  to increase the value in the same number of steps. 5. Measure the color temperature using BM-5 and adjust the values of x and y are set within the range of $x = 0.280$ to 0.290 and $y = 0.310$ to 0.320 using  and . <p>As a reference; To increase the value x, decrease the value of  and to increase the value y, increase the value of .</p> <p>$x = 0.27 \pm 0.005$ $y = 0.300 \pm 0.015$ Color temperature: $10000K \pm 500K$</p>


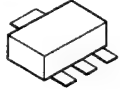
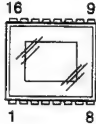
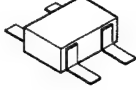


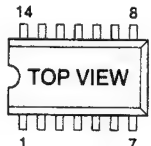
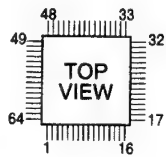

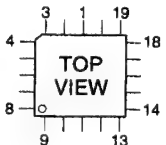



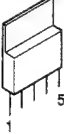
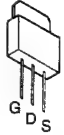
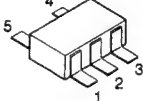
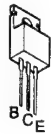
SECTION 2

SERVICING DIAGRAMS

1. PART CONFIGURATION AND THEIR SYMBOLS

1.ICs

NAME	SHAPE	NAME	SHAPE
TC203E2651AF EPF6016QC208		TDA9141	
SYG-TC160G		MC74HC165F MM1024AF M62320FP MAX497CSE	
HD49811TFA		CD0016AM	
6473337PROG		TDA4780	
CXA1855Q CXA3197R HD49322BF CXA3026Q		TC9090AN	
CXA3106Q		M52347FP UPD4721GS M62399FP	
MB814265-60		CXD1267AN	
M52348FP		TC74HCT240AF TC74ACT244F TC74HC541AF	
M52320SP		MC74HC541FEL	

NAME	SHAPE	NAME	SHAPE
TDA4672		2SC2873-Y(C) TA78L05F	
ICX059AK-6		MM1031XMR	
TDA4665T CXA1315M		M52055FP	
TC74HC125AF TC74ACT04F MC74HC14AF		CXA2112R CXA2111R	
TLC2932IPW		EPC1LC20	
TC7W32FU AK93C65AV MAX4121CSA MC33078M M5222FP TC7W74FU		LA4425A	
CAT24C16J TC4W53F		2. TRANSISTORS	
PQ20VZ1U LM2991SX		PQ05SZ1U	
TC7S04F TC7S32F TC7S08F TC7S04FU TC7S14F RN5VD27A		2SC3834	

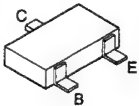
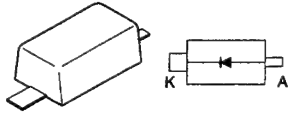
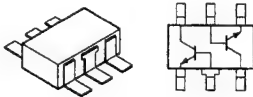
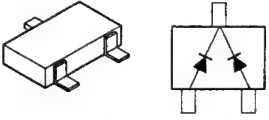

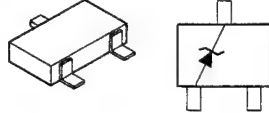
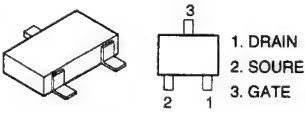
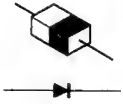

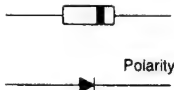

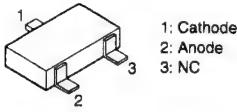
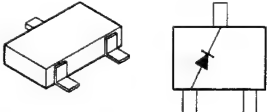
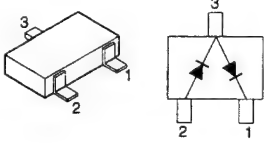
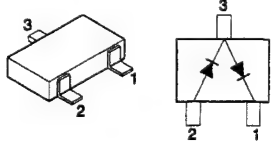
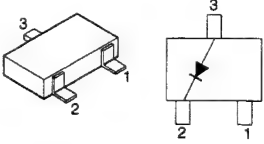
NAME	SHAPE	NAME	SHAPE
RN2404,2SC2712-Y 2SA1298-Y,2SC2712-Y 2SC3265-Y,2SC3356 2SA1586-Y,RN1402 2SA1162-Y,2SC3931-C 2SC4116-Y,UN5213		MA111	
UMZ1		1SS301	
XN6213		RD12M RD15M-T2BB2 RD5.1M-T1BB2 RD2.4M	
2SK880-Y		1T363	
3.DIODEs		DTZ8.2B DTZ15C	
MTZJ15B		SPR325MVWMNP	
RD10MB2		RD6.2M-T2BB2 RD2.0M-T1BB	
1SS302 1SS226		1SS372	
1SS187			

Fig. 2-1-1

1-1. Replacing Subminiature "CHIP" Parts

1-1-1. Required Tools:

1. Fine tipped, well insulated soldering "pencil", about 30 Watts.
2. Tweezers.
3. Blower type hair dryer.

1-1-2. Soldering Cautions:

1. Do not apply heat for more than 3s.
2. Avoid using a rubbing stroke when soldering.
3. Discard removed chips; do no reuse them.
4. Supplementary cementing is not required.
5. Use care not to scratch or otherwise damage the chips.

1-1-3. Removal (Resistors, Capacitors, etc.):

1. Melt the solder at one side.

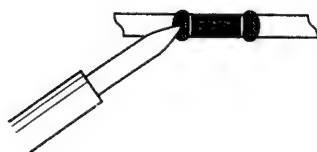


Fig. 2-1-2

2. Grasp the part with tweezers and melt the solder at the other side.

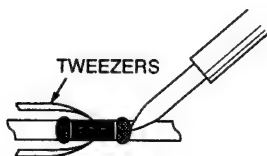


Fig. 2-1-3

3. Remove the part with a twisting motion.

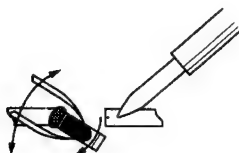


Fig. 2-1-4

1-1-4. Removal (Transistors, Diodes, etc.):

1. Melt the solder of one lead.

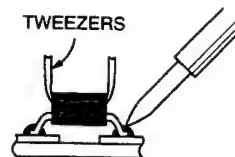


Fig. 2-1-5

2. Lift the side of that lead upward.

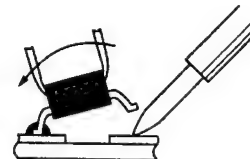


Fig. 2-1-6

3. Simultaneously heat solder the two remaining leads and lift part to remove.

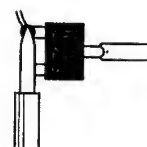


Fig. 2-1-7

1-1-5. Preheating (Except for semiconductors):

Immediately before installing new resistors or capacitors, use a blower type hair dryer and preheat the part for about two min. at approximately 150°C.

1-1-6. Replacement:

1. Presolder the contact points of the circuit pattern.

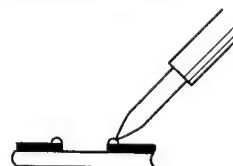


Fig. 2-1-8

2. Press the part downward with tweezers and apply the soldering pencil as indicated in the figure.

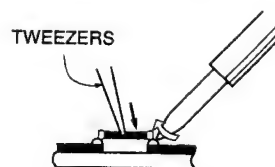


Fig. 2-1-9

1-2. Precautions for Part Replacement

- In the schematic diagram, parts marked Δ (ex. Δ F801) are critical part to meet the safety regulations, so always use the parts bearing specified part codes (SN) when replacing them.
- Using the parts other than those specified shall violate the regulations, and may cause troubles such as operation failures, fire etc.

1-3. Solid Resistor Indication

Unit	None Ω k $k\Omega$ M $M\Omega$
Tolerance	None $\pm 5\%$ B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ K $\pm 10\%$ M $\pm 20\%$
Rated Wattage	(1) Chip Parts None 1/16W (2) Other Parts None 1/6W Other than above, described in the Circuit Diagram.
Type	None Carbon film S Solid R Oxide metal film W Metal film W Cement FR Fusible

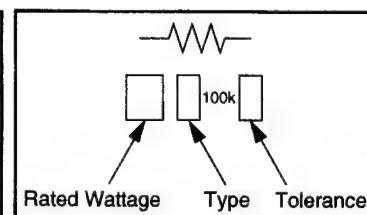


Fig. 2-1-10

1-4. Capacitance Indication

Symbol	$\text{---} \text{---} \text{---}$ Electrolytic, Special electrolytic $\text{---} \text{---} \text{---}$ Non polarity electrolytic $\text{---} \text{---} \text{---}$ Ceramic, plastic $\text{---} \text{---} \text{---}$ Film $\text{---} \text{---} \text{---}$ Trimmer
Unit	None F μ μF p pF
Rated voltage	None 50V For other than 50V and electrolytic capacitors, described in the Circuit Diagram.
Tolerance	(1) Ceramic, plastic, and film capacitors of which capacitance are more than 10 pF. None $\pm 5\%$ or more B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ (2) Ceramic, plastic, and film capacitors of which capacitance are 10 pF or less. None more than $\pm 5\%$ pF B ± 0.1 pF C ± 0.25 pF (3) Electrolytic, Trimmer Tolerance is not described.
Temperature characteristic (Ceramic capacitor)	None SL For others, temperature characteristics are described. (For capacitors of 0.01 μF and no indications are described as F.)

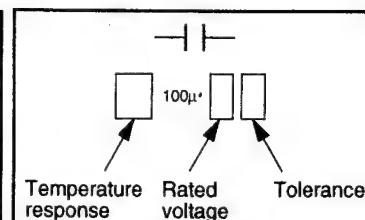


Fig. 2-1-11

1-5. Inductor Indication

Unit	None H μ μH m mH
Tolerance	None ±5% B ±0.1% C ±0.25% D ±0.5% F ±1% G ±2% K ±10% M ±20%
Type	PL Peaking For other, model name is described.

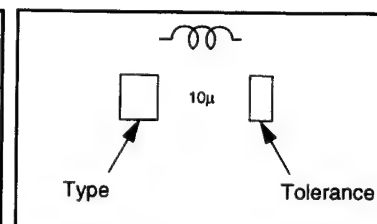


Fig. 2-1-12

1-6. Waveform and Voltage Measurement

- Measurement of waveform and voltage at each section in the color circuits was conducted with sufficient service color bar signal being received and reproduced in normal conditions.
- Waveforms and voltage values for the remaining circuit were measured with a broadcasting signal normally received, so they may vary slightly according to the programs being received. Use them as a measure for servicing.
- All voltage values except the waveforms are expressed in DC and measured by a digital voltmeter.

3. If it is difficult to remove the part, temporarily stop the desoldering job and wait until temperature of the part lowers. Then, repeat steps 1 and 2.
4. Form leads of the replacement part (general part equivalent to the chip part) as shown in the figures and solder place. (Fig. 2-1-14)

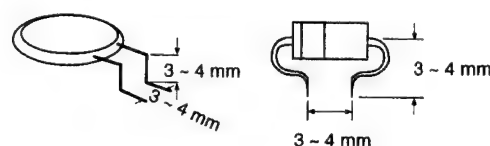


Fig. 2-1-14

1-7. Chip Part Replacement

(Use spare part with wire leads connected.)

1. Hold a Chip part to be removed with tweezers and apply heat to the solder at one end of the part with a soldering iron. (Fig. 2-1-13)

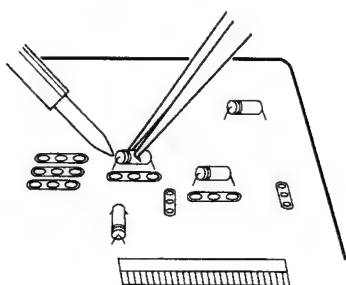


Fig. 2-1-13

2. Apply heat to the solder at the other end of the part and remove it.

The heating time should be as short as possible so the excessive heat is not applied to foil patterns and the PC Board.

5. Mount the replacement part so that it does not touch any other parts. (Fig. 2-1-15)

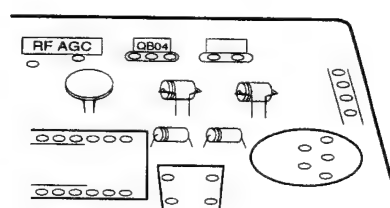


Fig. 2-1-15

2. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

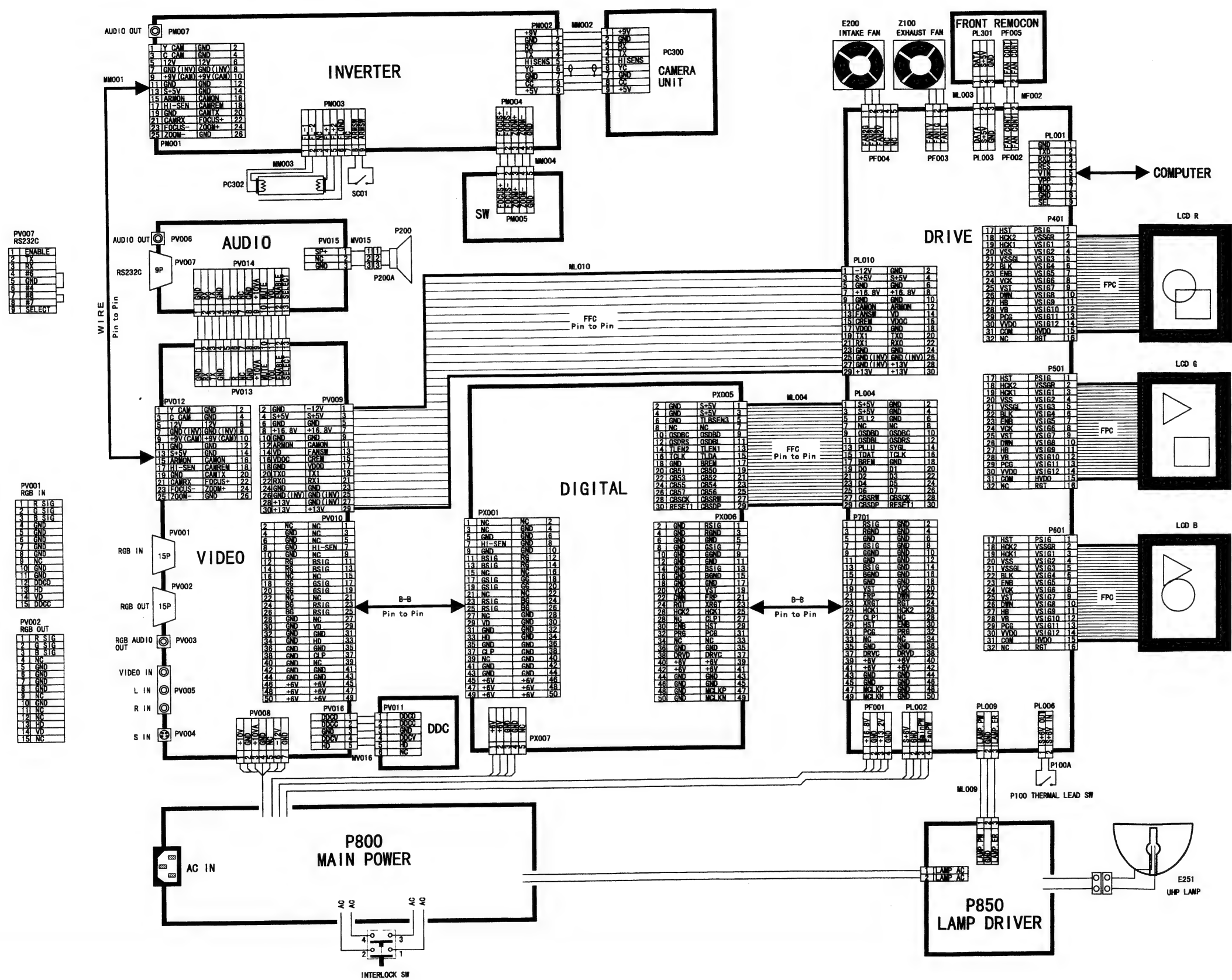


Fig. 2-2-1

3. BLOCK DIAGRAMS

3-1. System Block Diagram

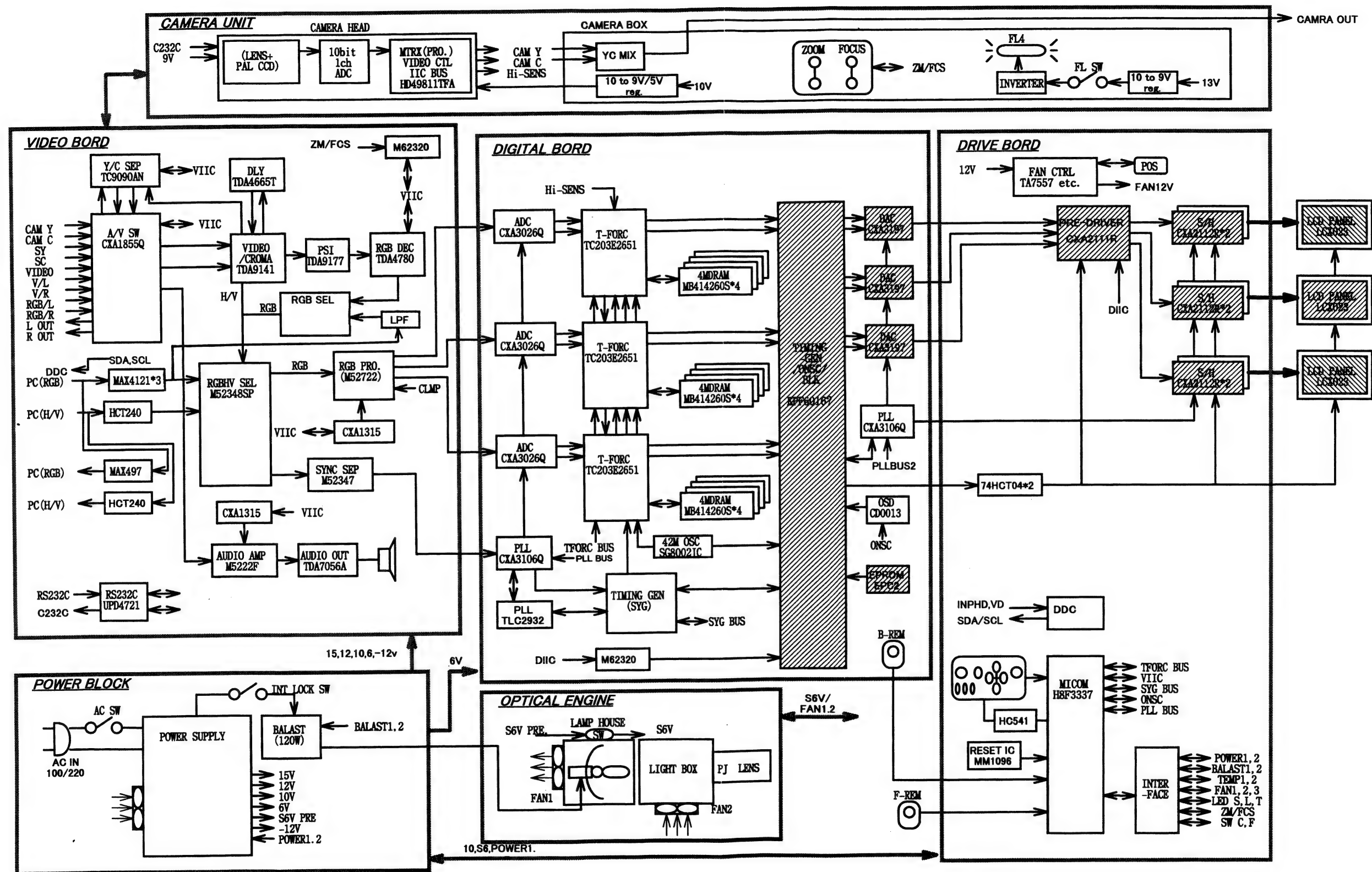
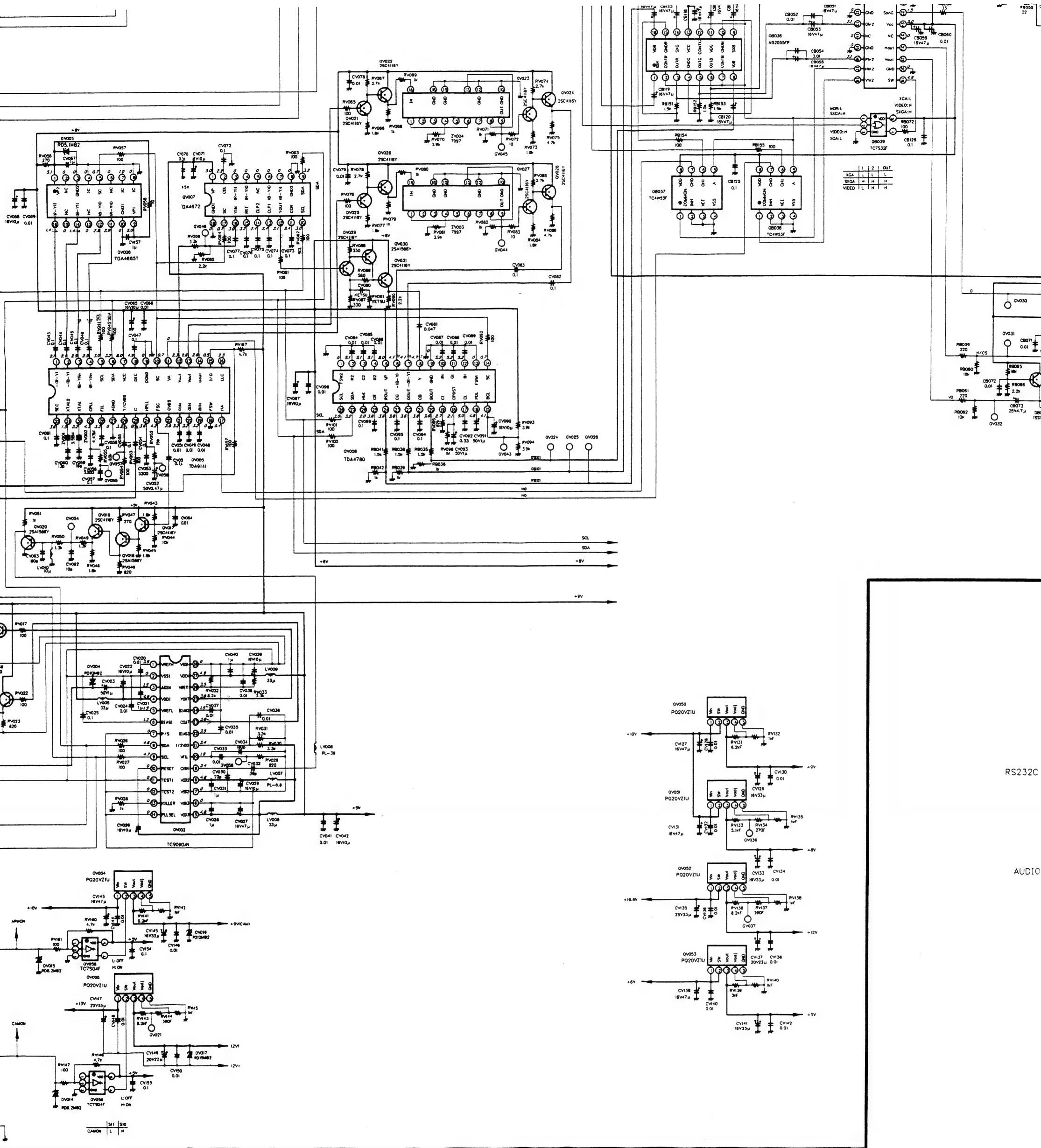
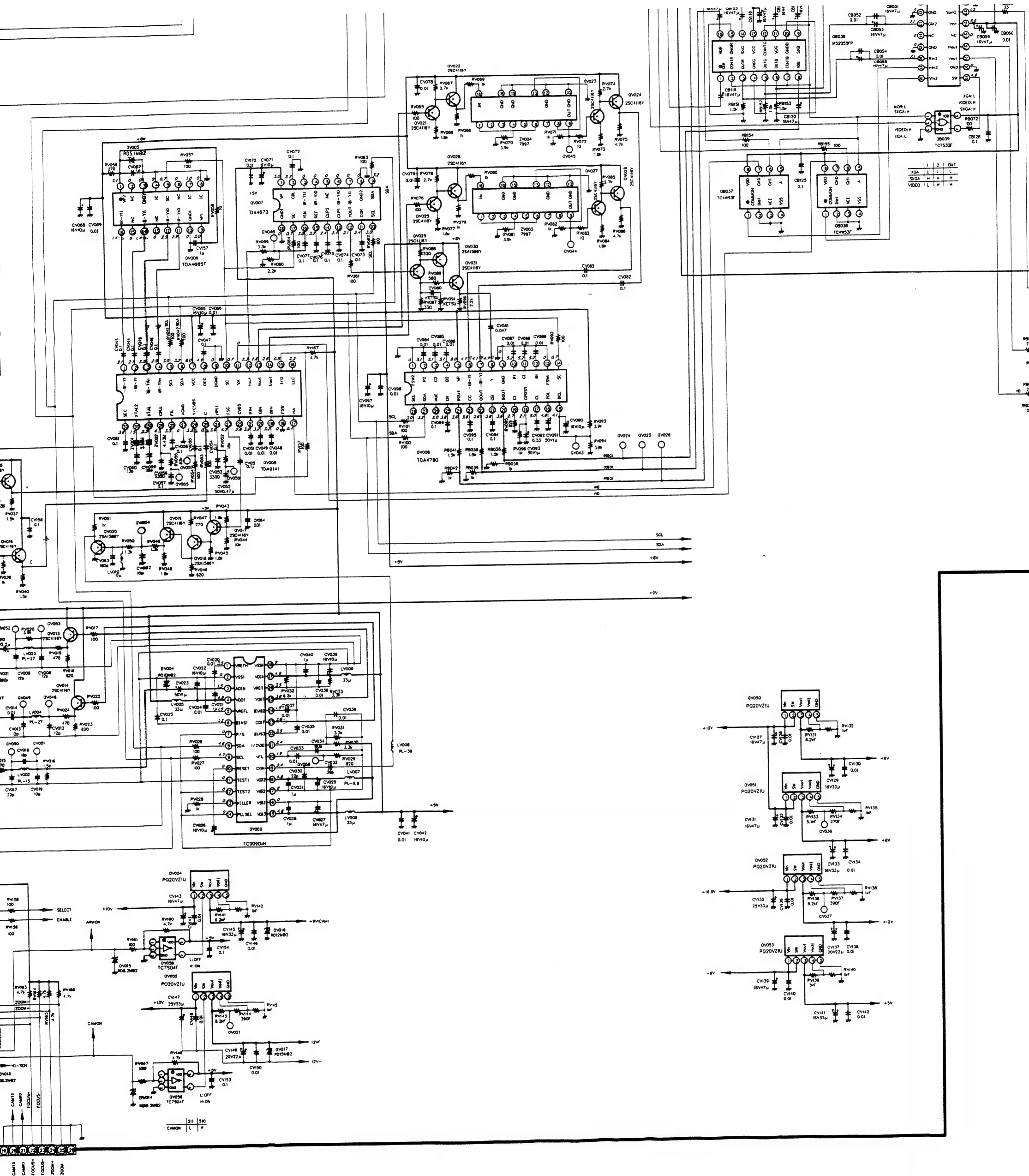


Fig. 2-3-1

C







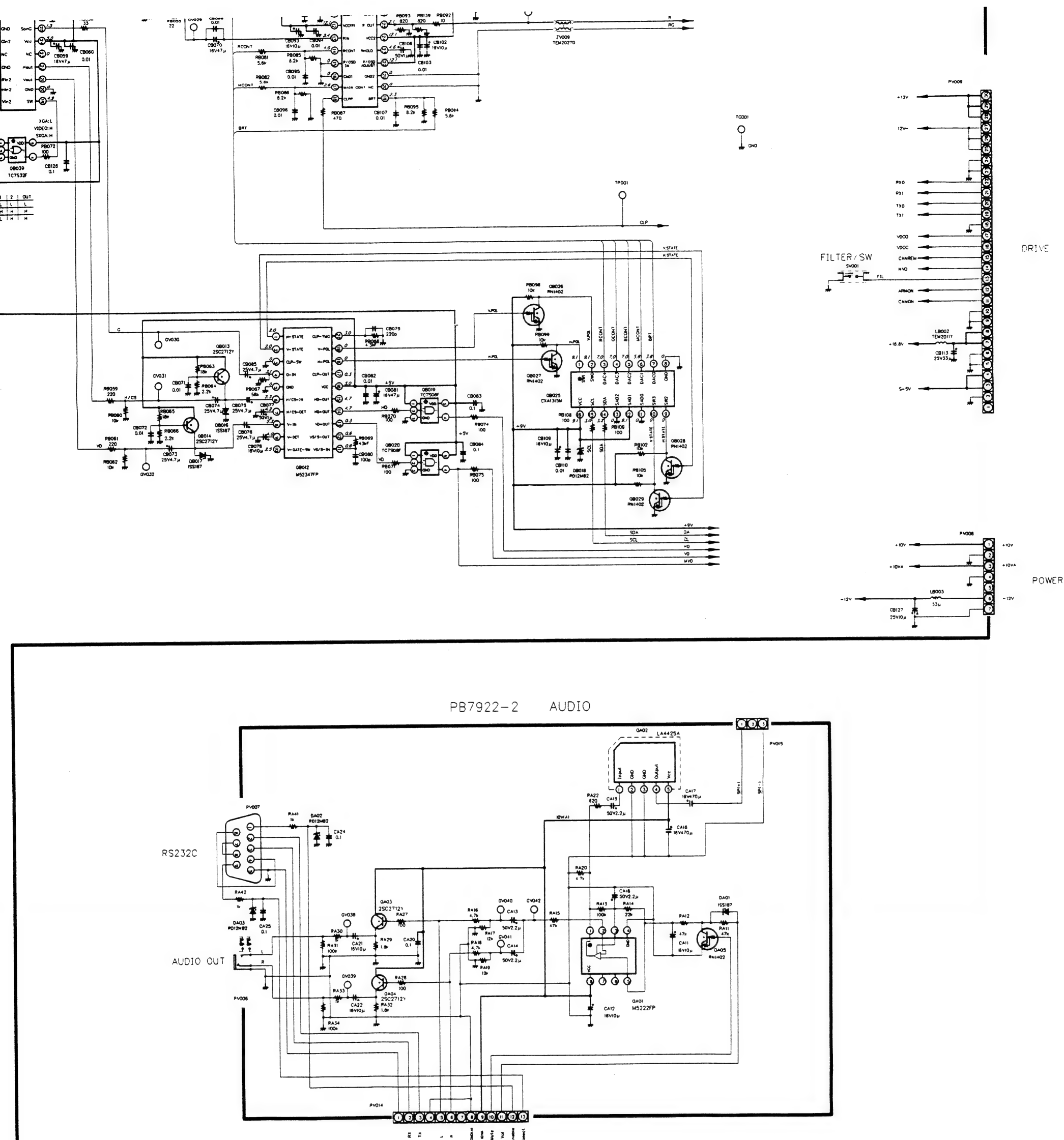
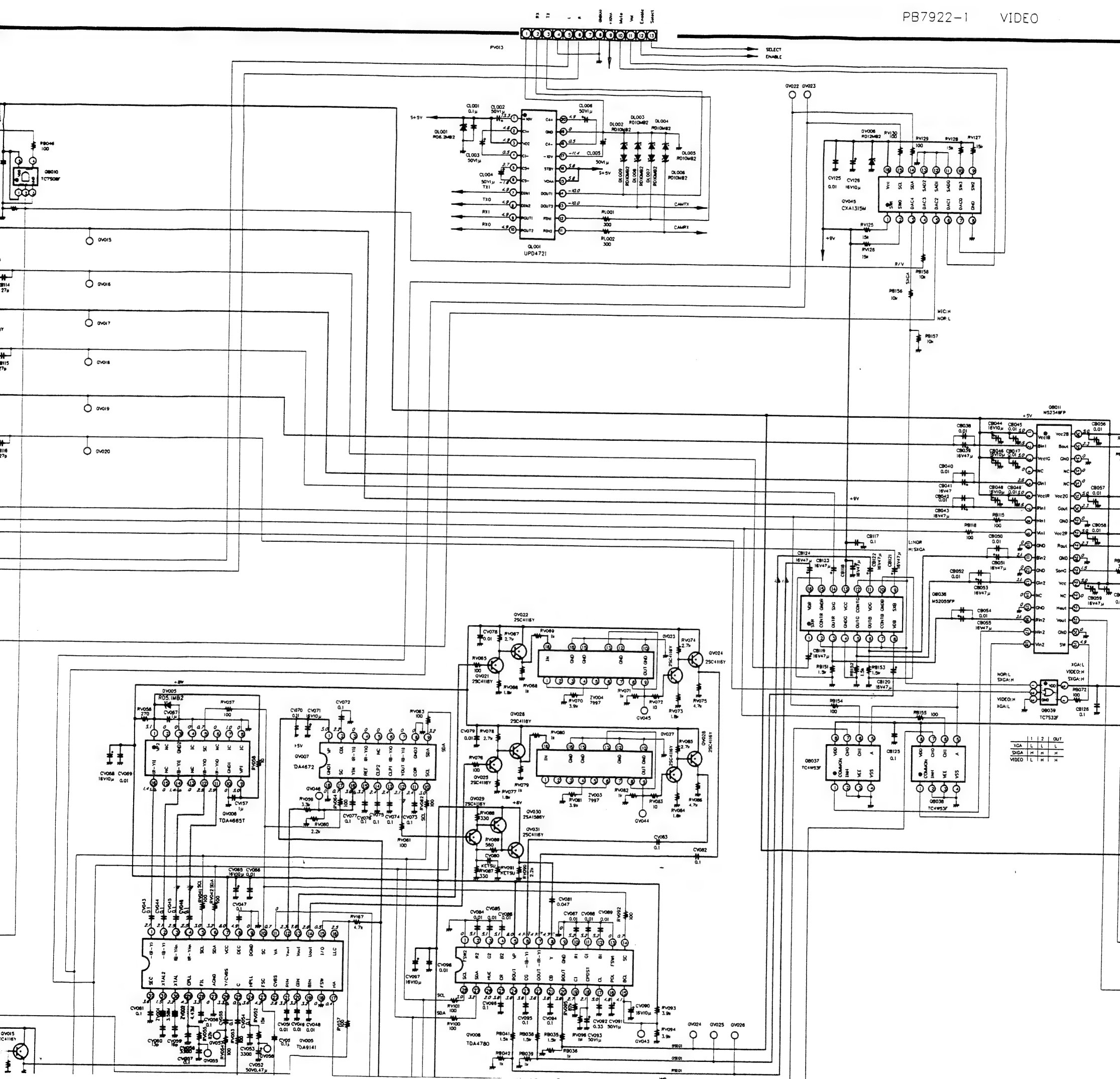


Fig. 2-4-1



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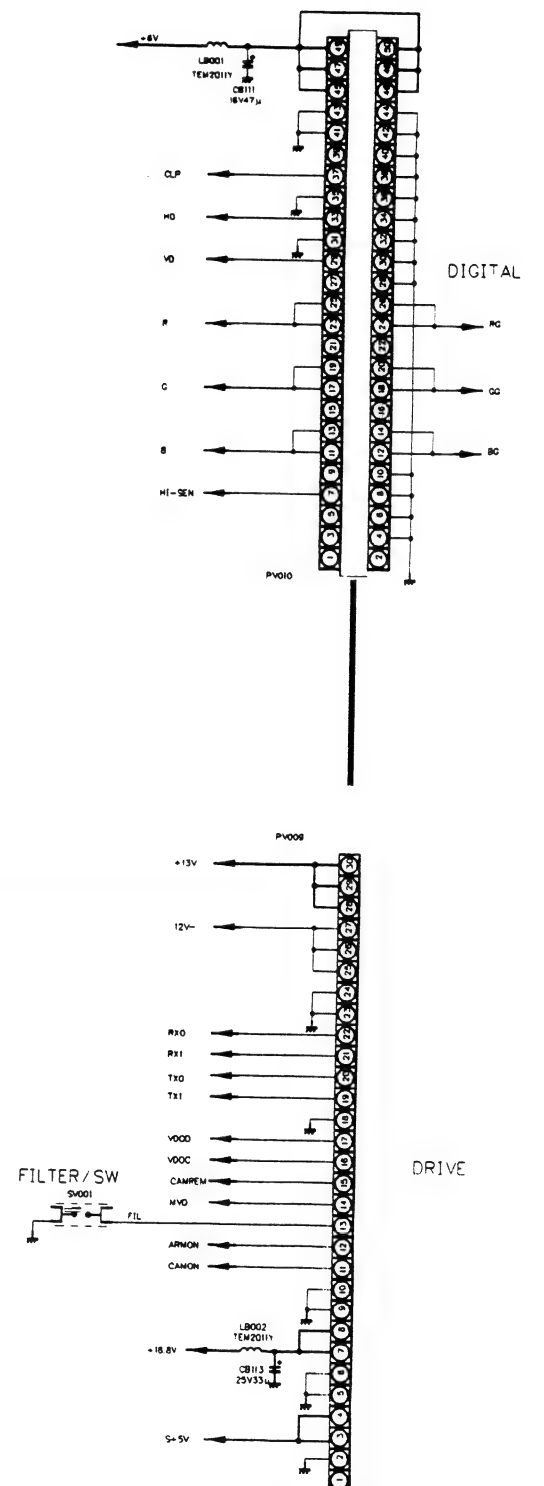
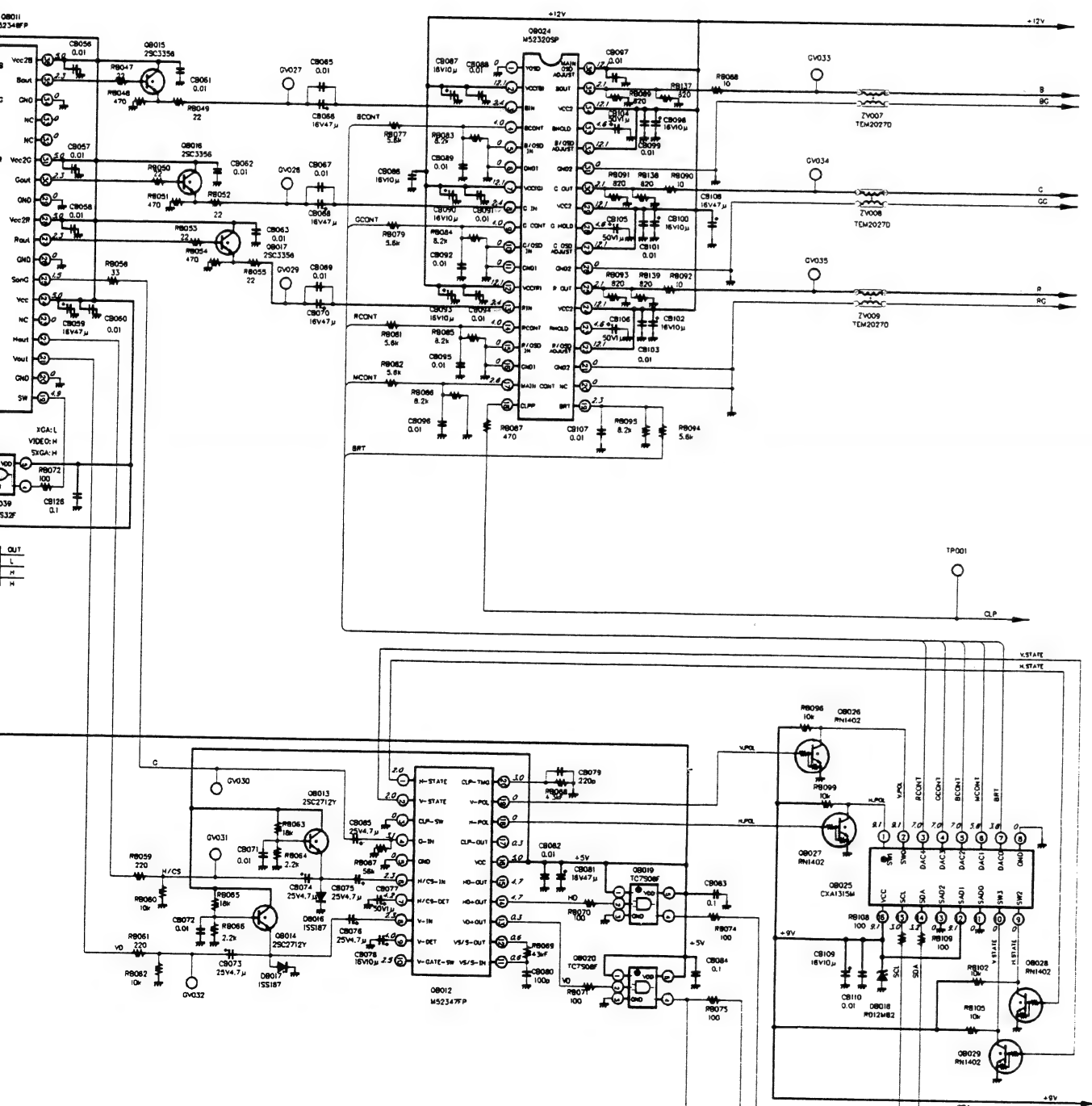
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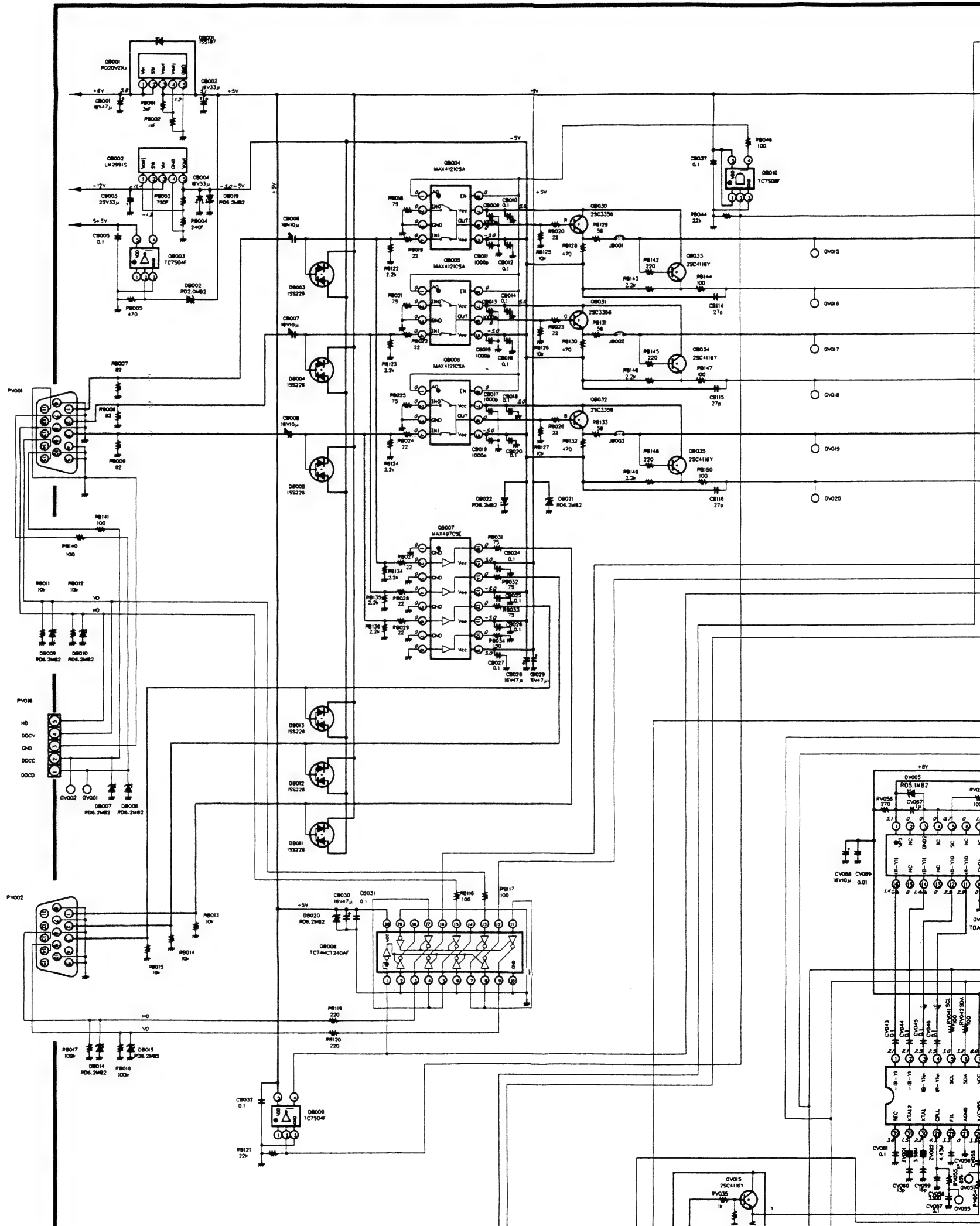
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7

4. CIRCUIT DIAGRAMS

4-1. Video/Audio Circuit Diagram



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10

11

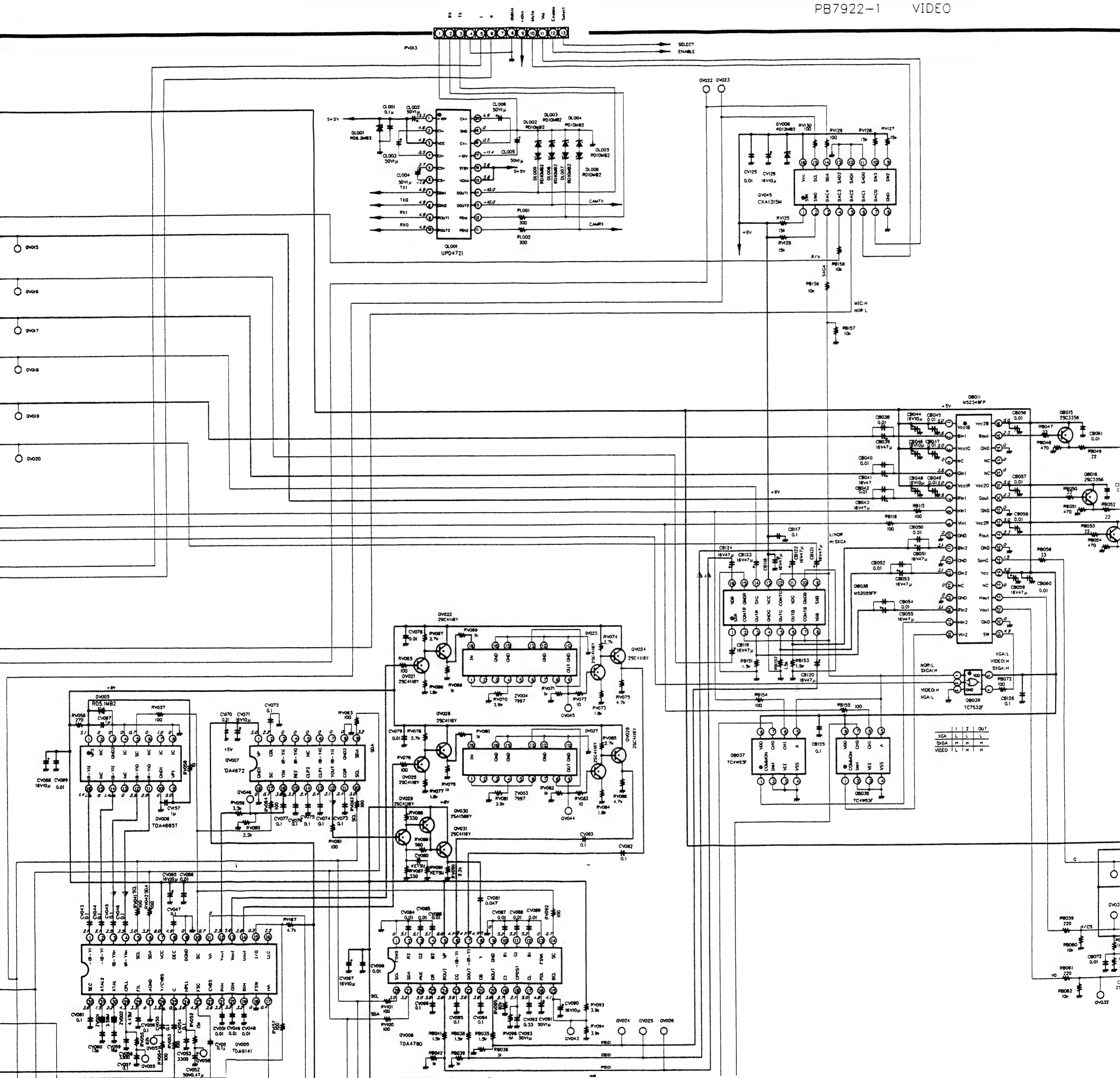
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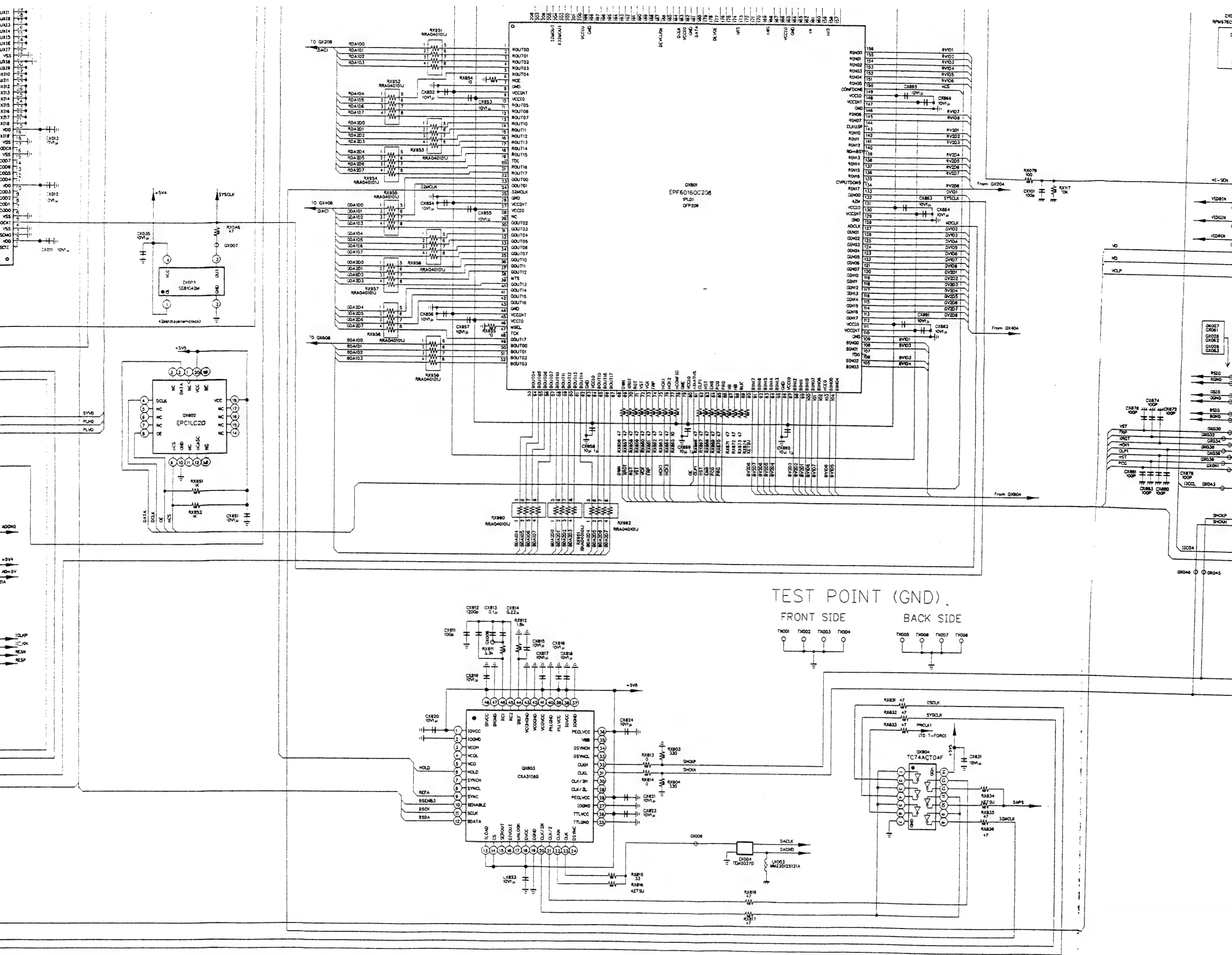
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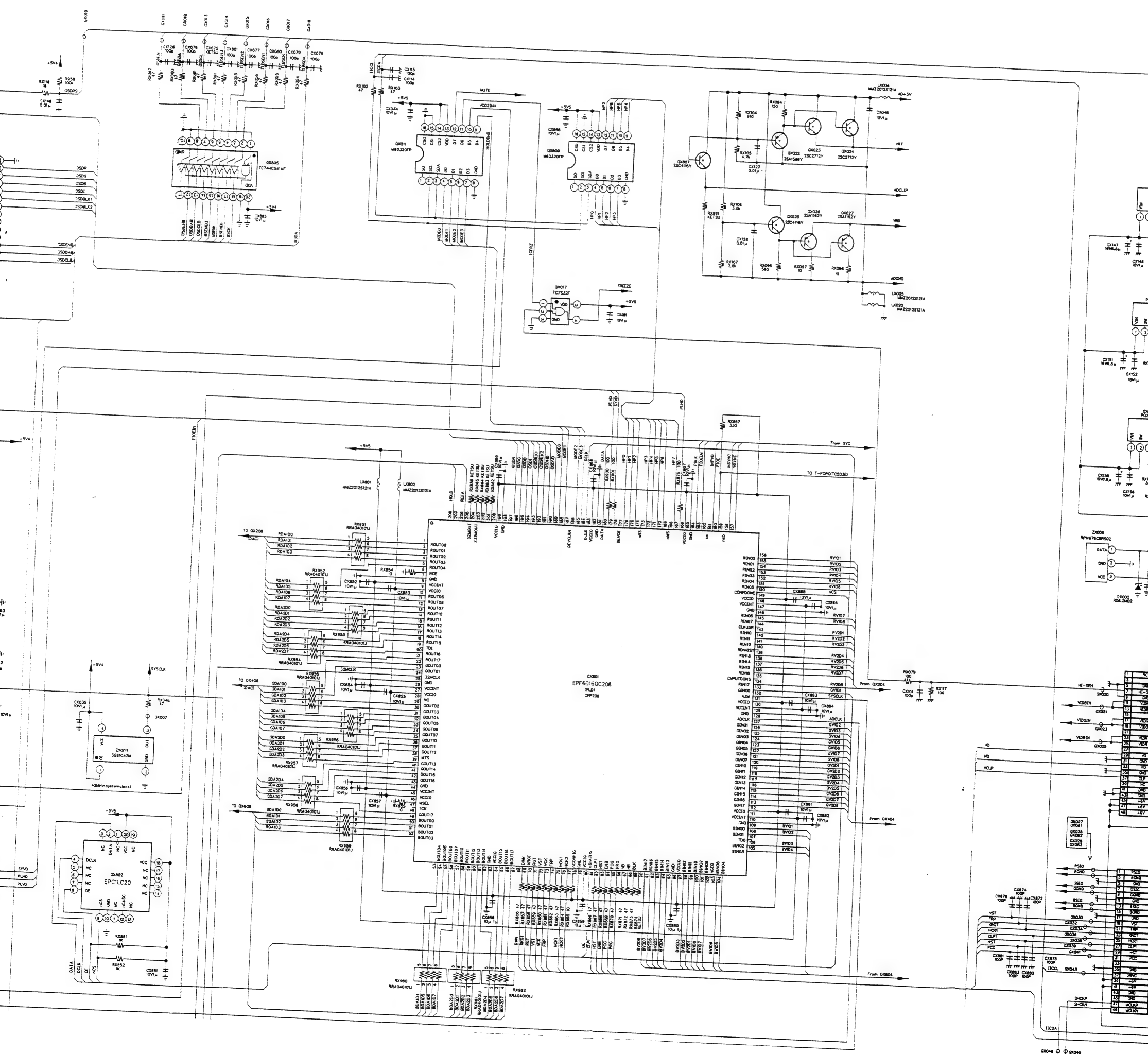
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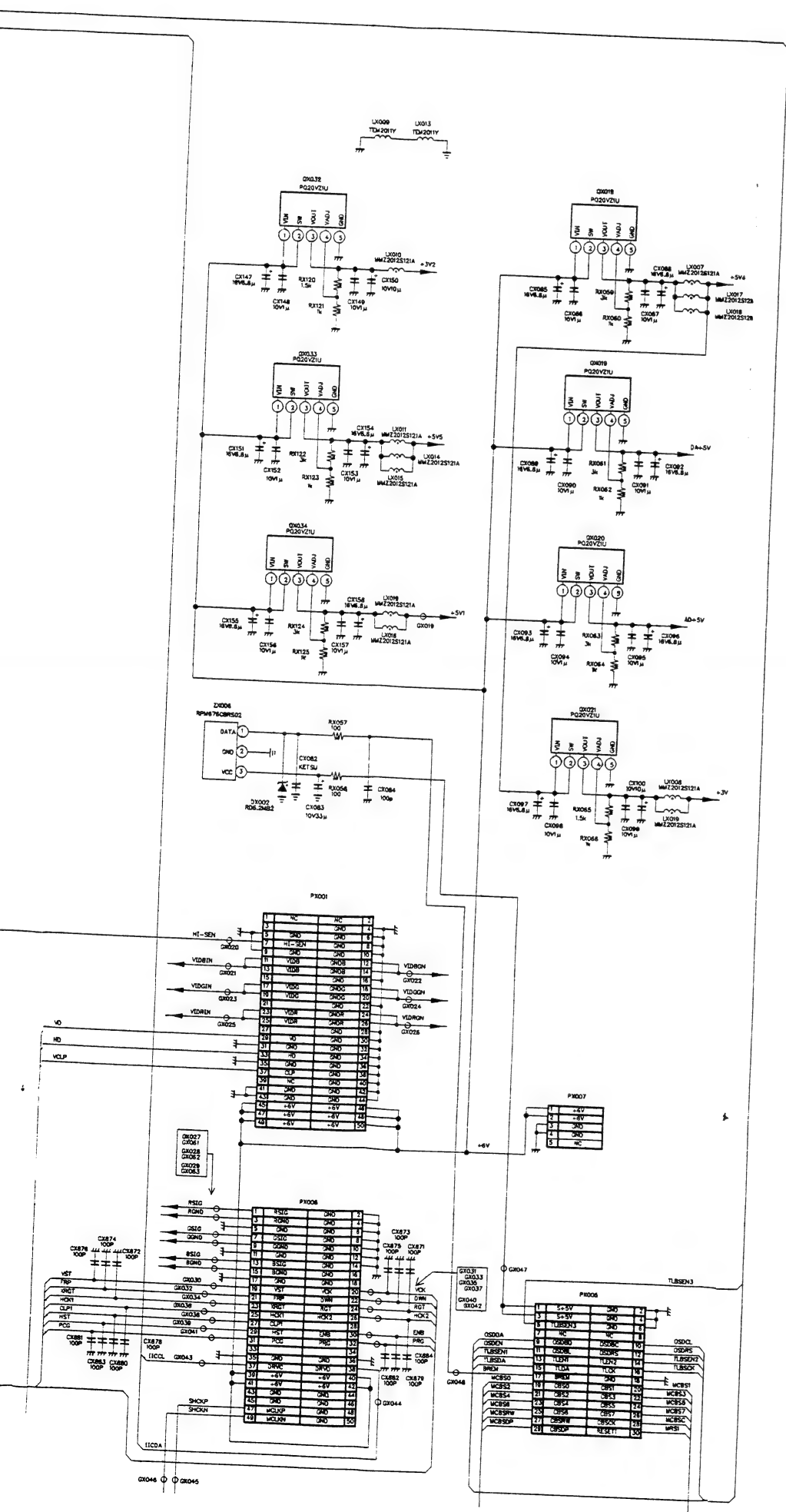
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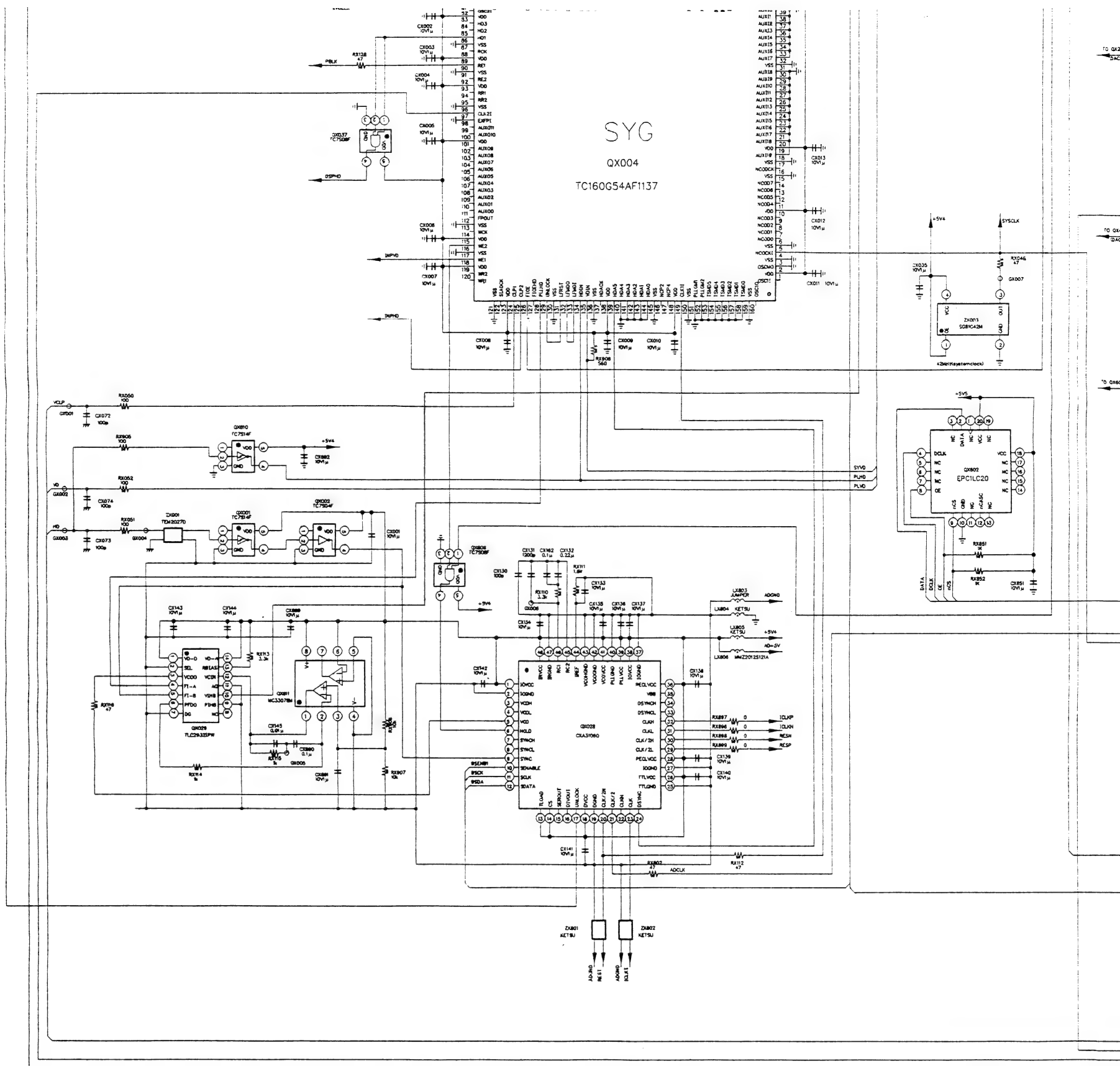
PB7922-1 VIDEO

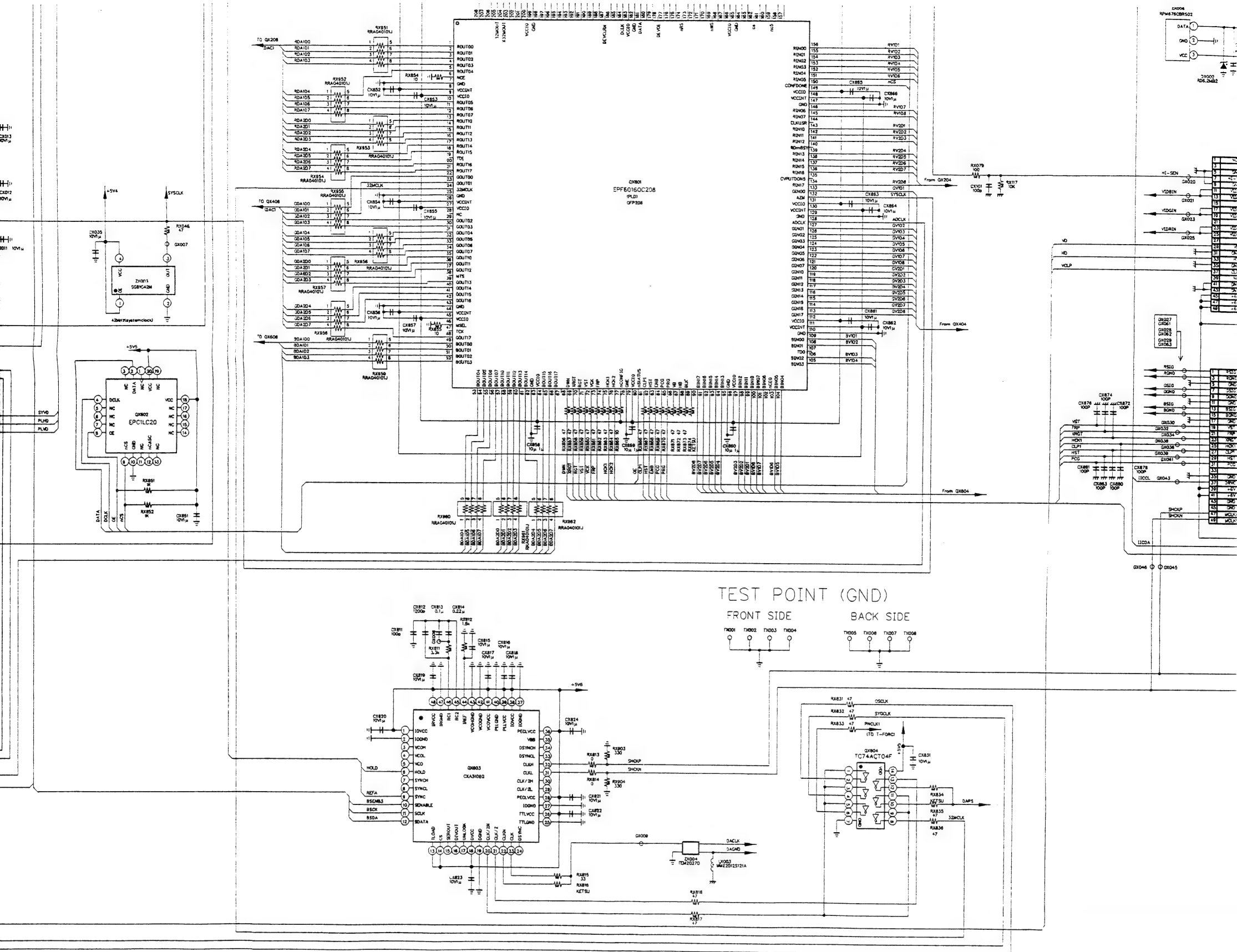












1

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A

4-2. Digital (Common) Circuit Diagram

B

C

D

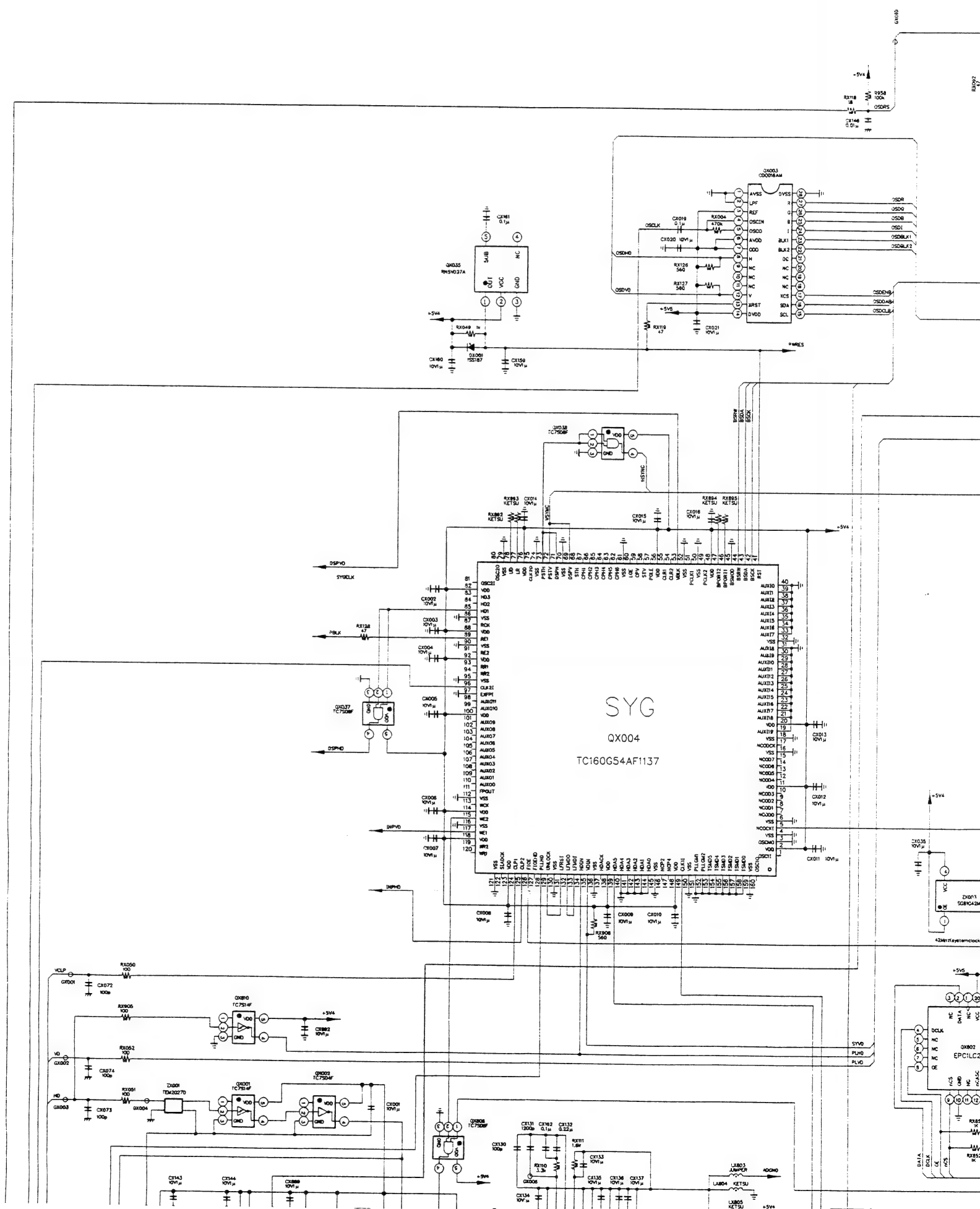
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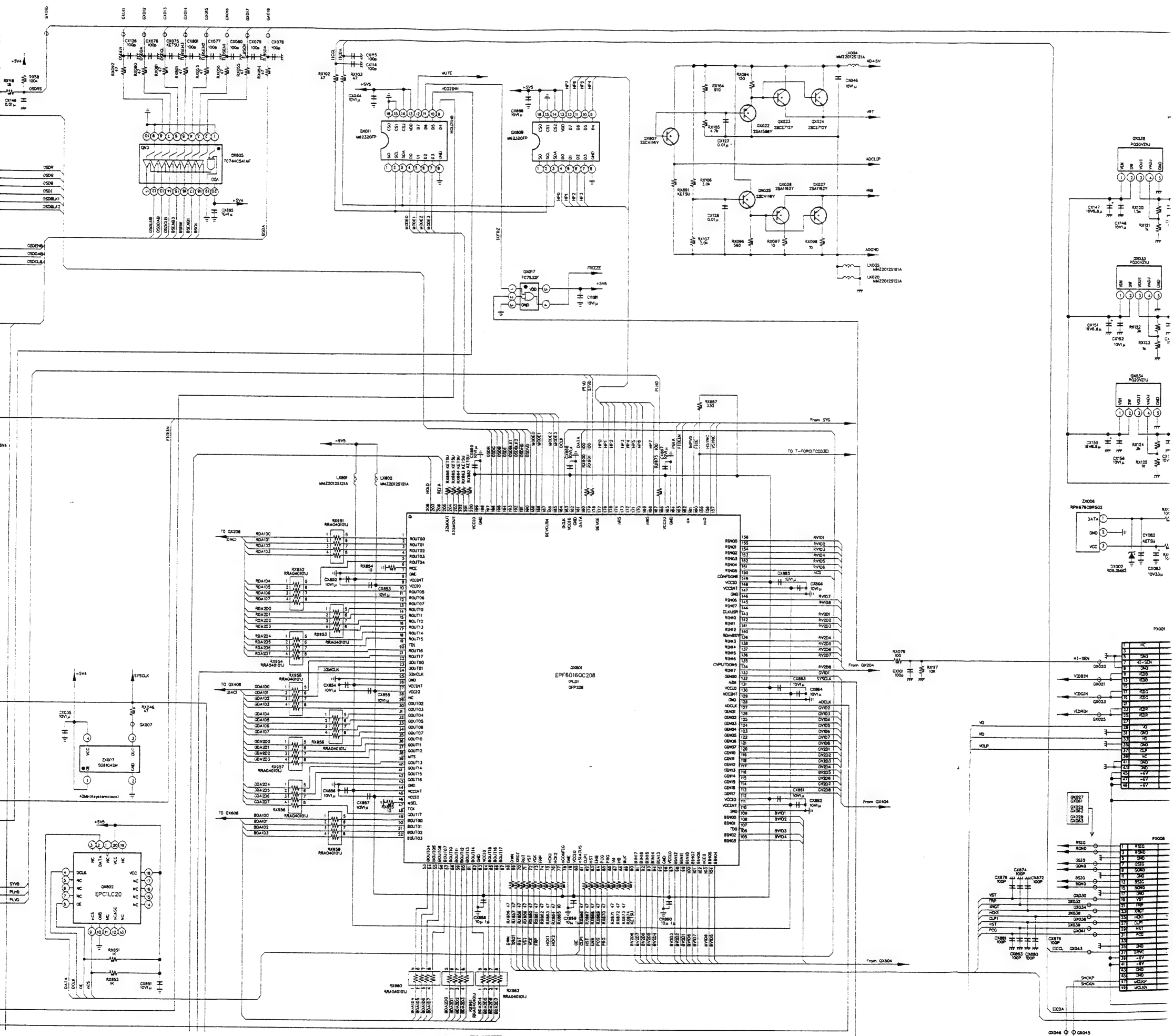
F

G

H

I





1 2 3 4 5 6 7

A 4-3. Digital (Rch) Circuit Diagram

B

C

D

E

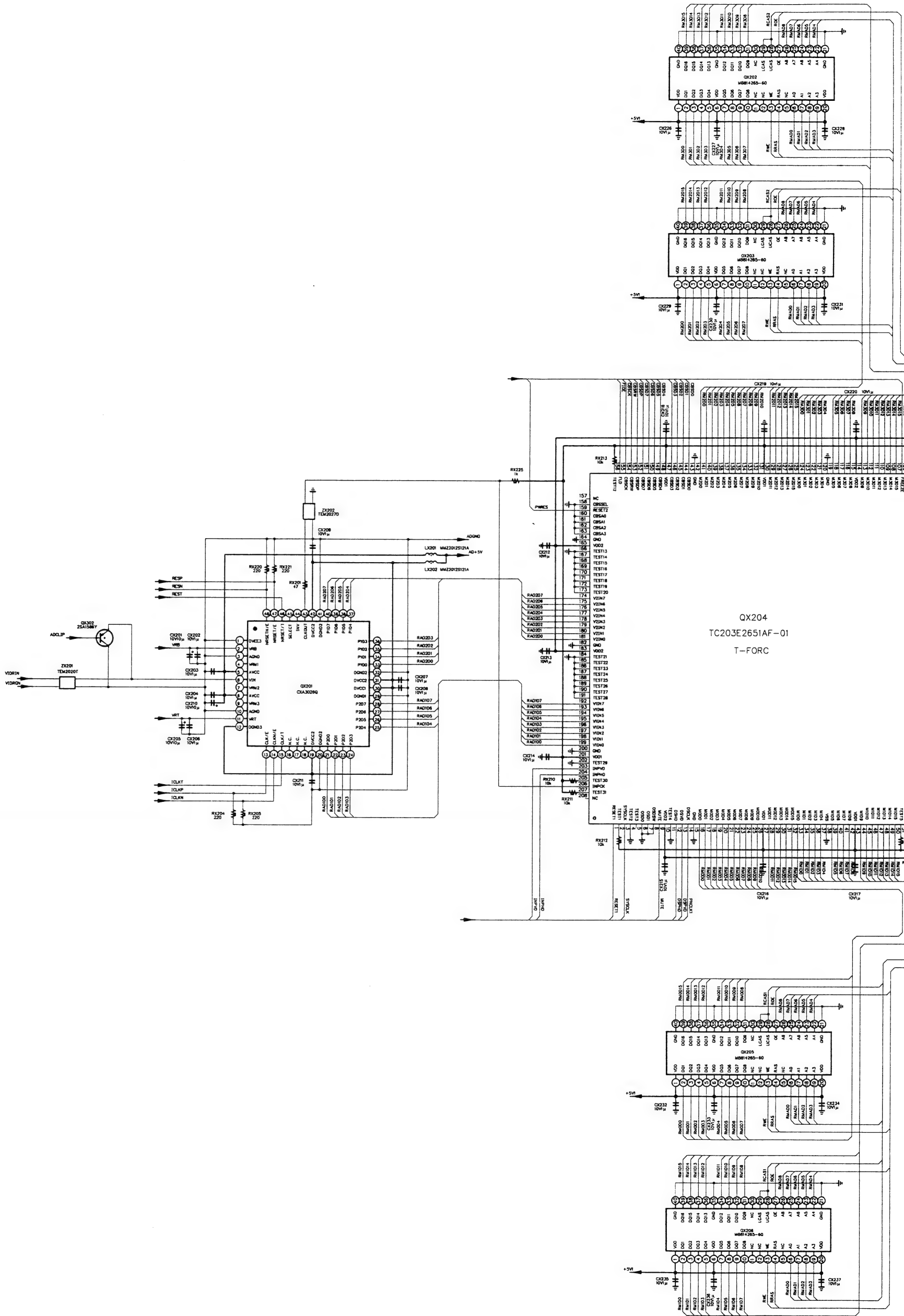
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G

H

I

J



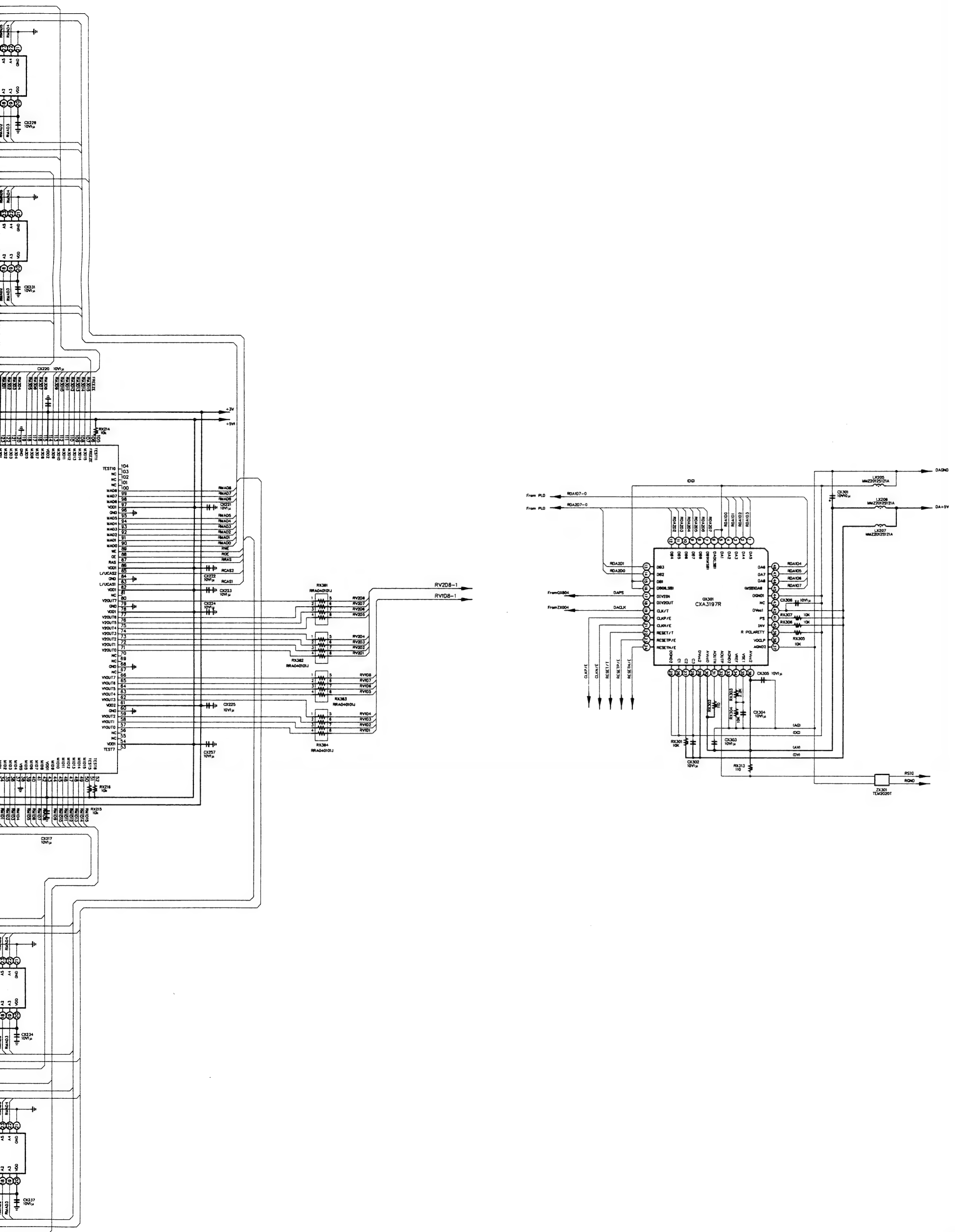
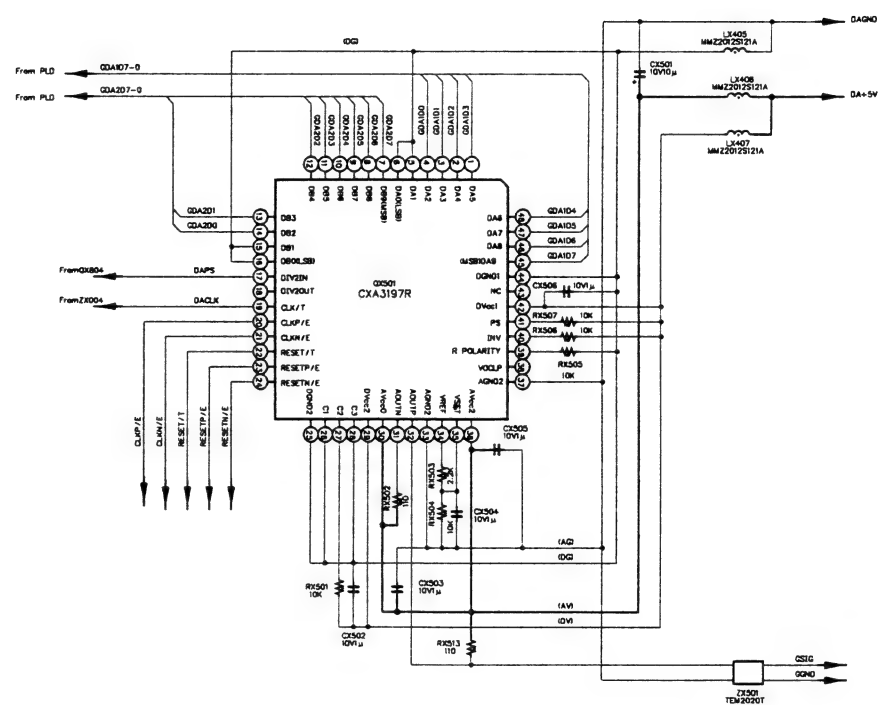


Fig. 2-4-3



2-24

4-5. Digital (Bch) Circuit Diagram

A

B

C

D

E

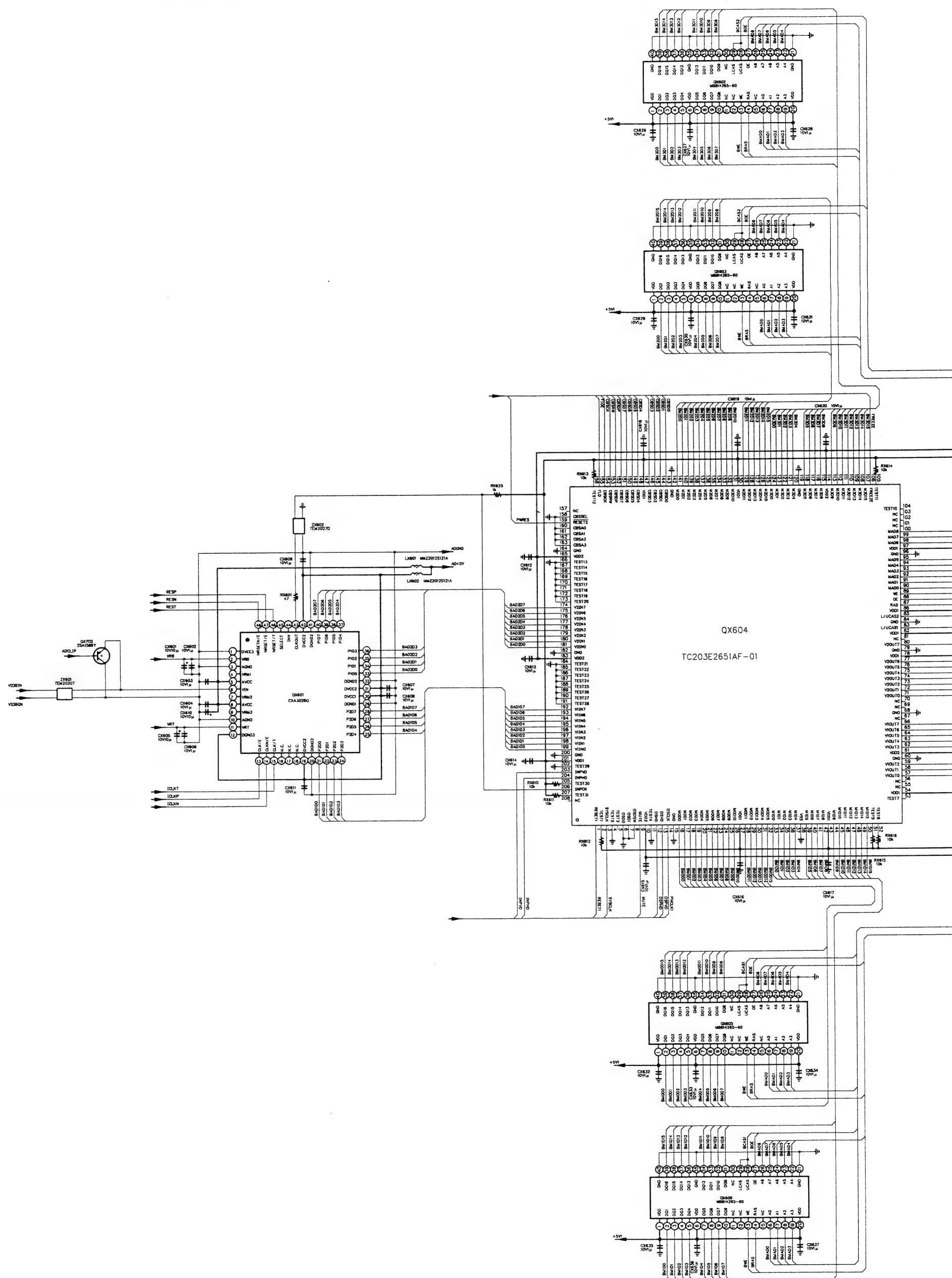
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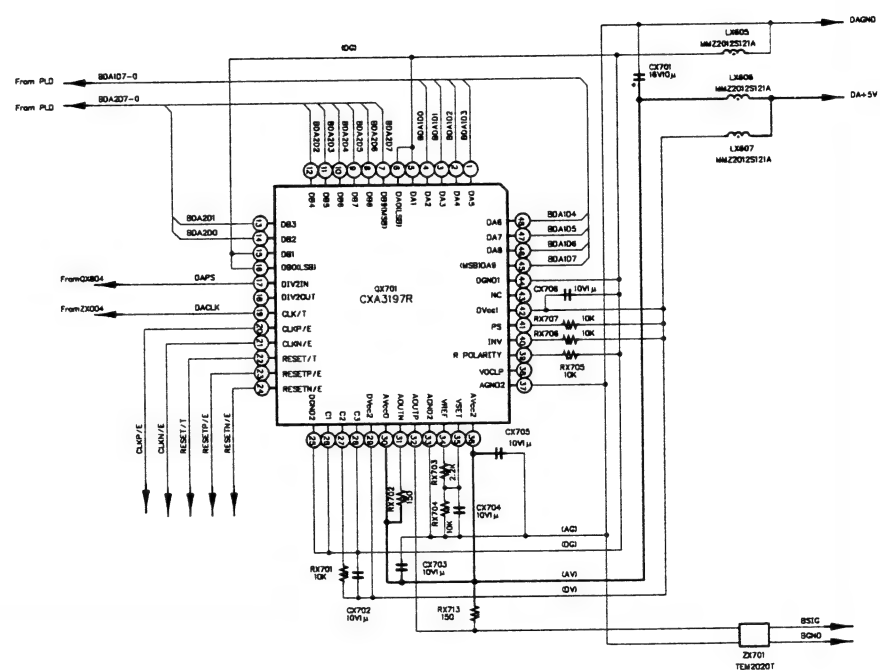
G

H

1

J





2-27

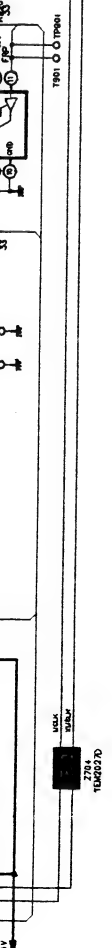
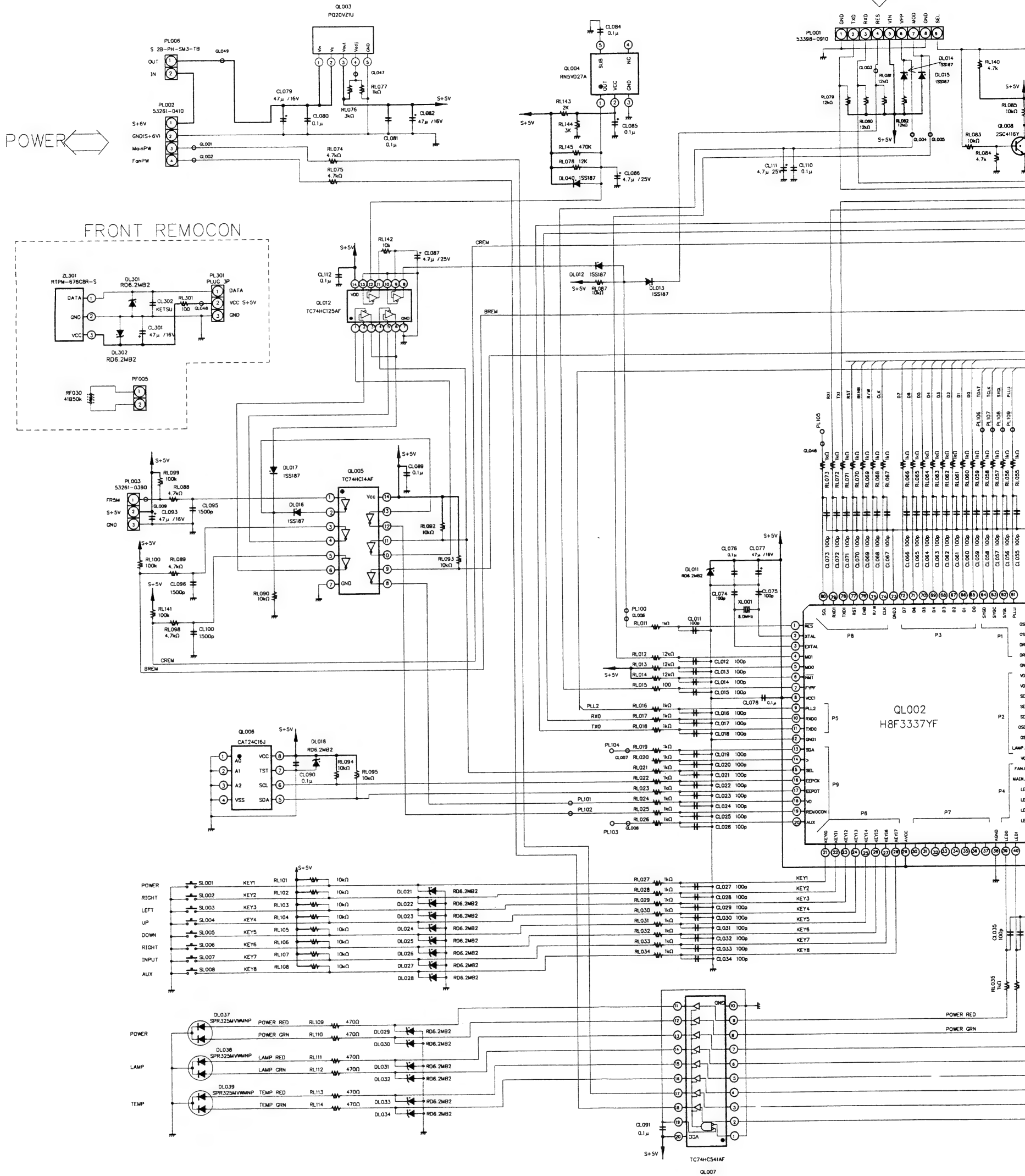


Fig. 2.

4-7. Microcomputer, F-REM Circuit Diagram



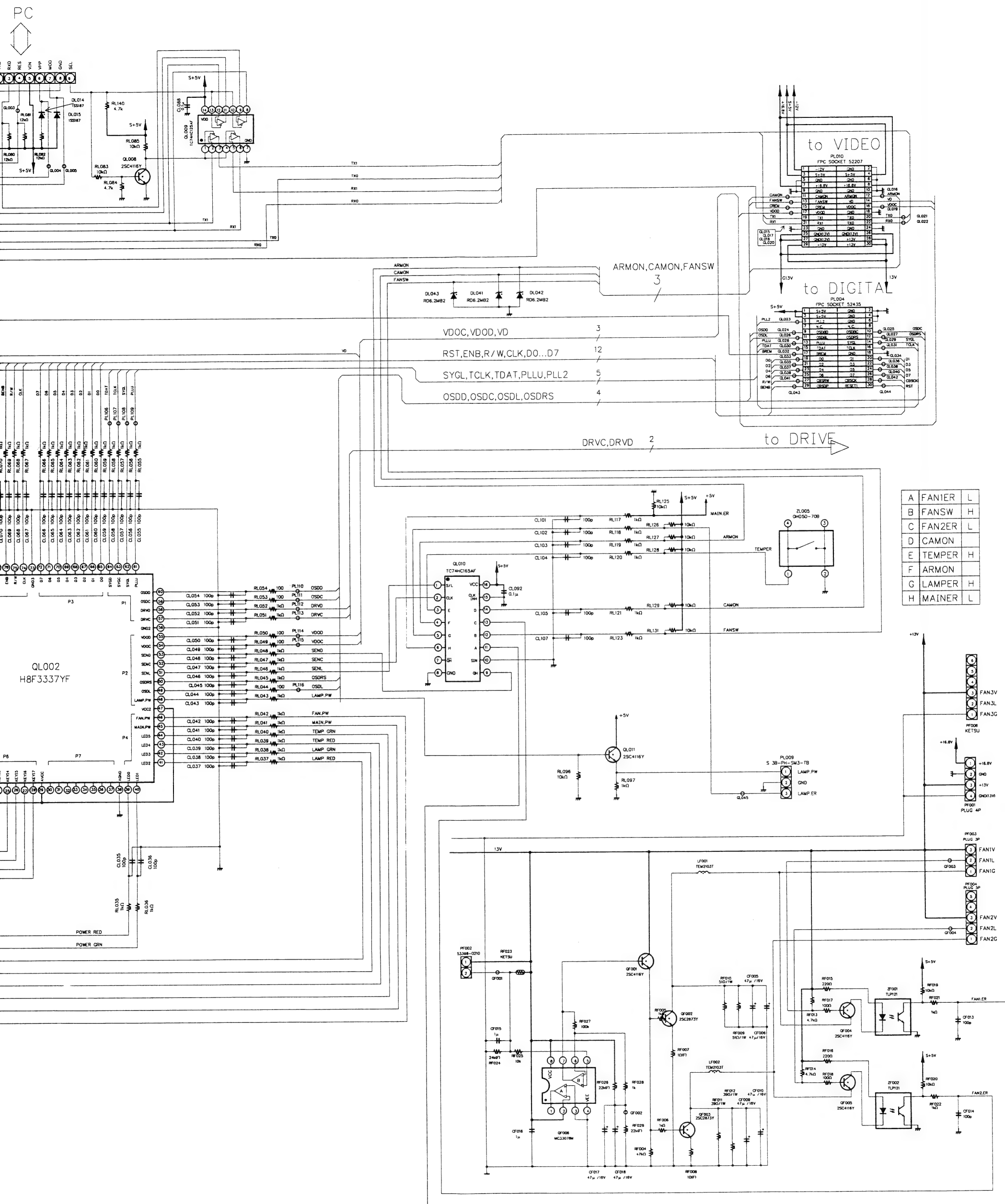


Fig. 2-4-7

5. PC BOARDS

5-1. Drive PC Board

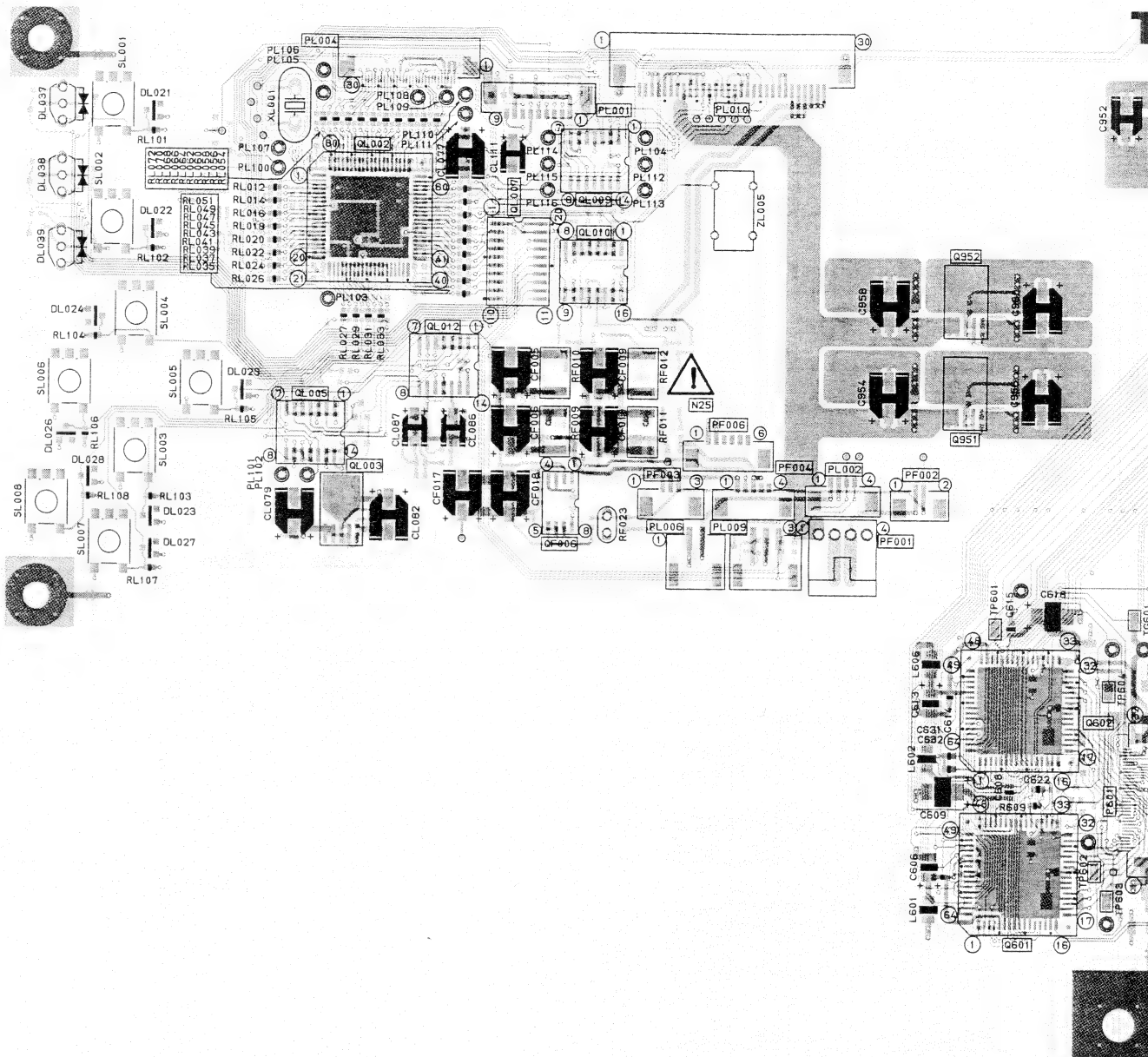
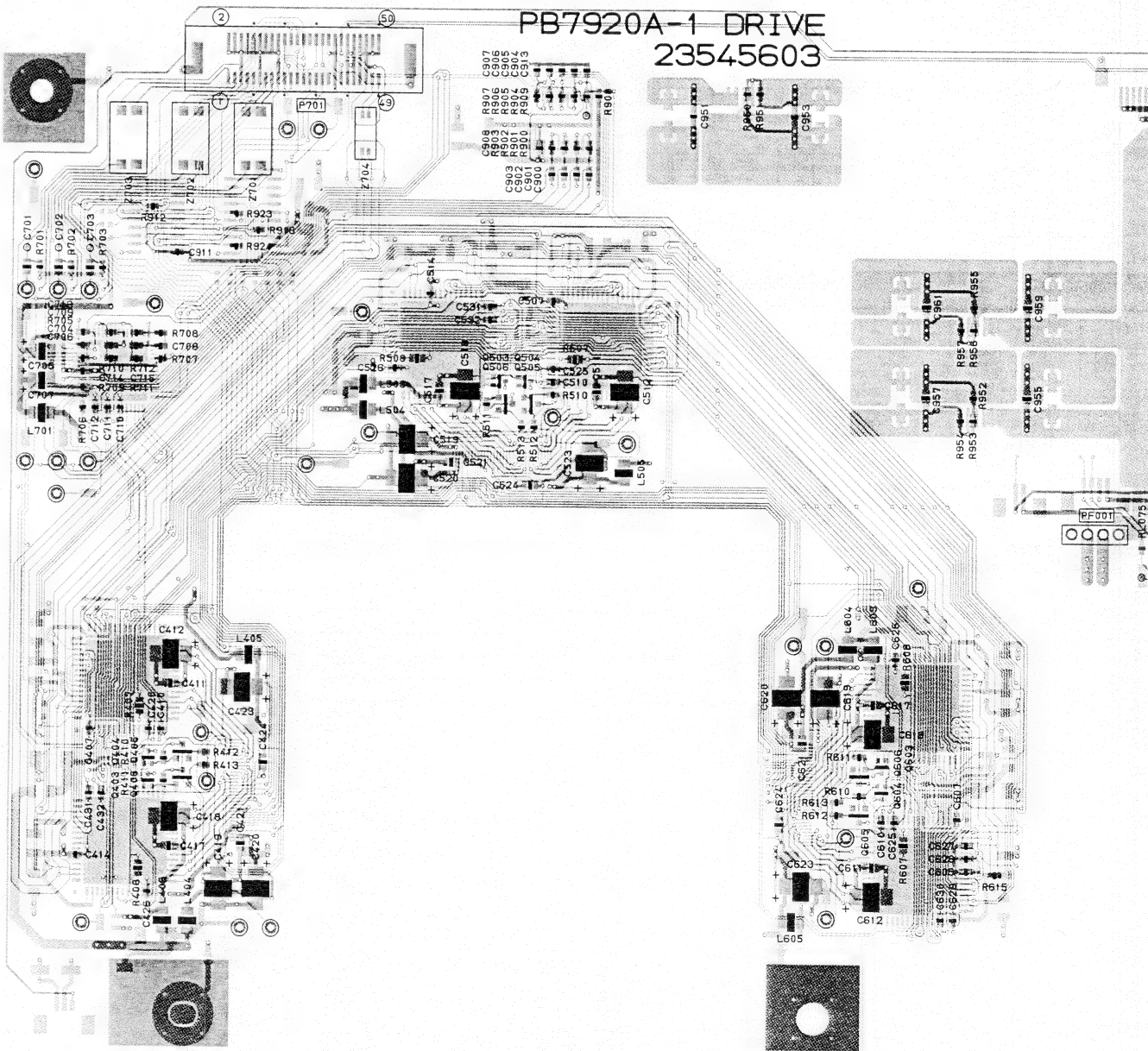


Fig. 2-5-1 U0011 Drive PC Board (Top Side)



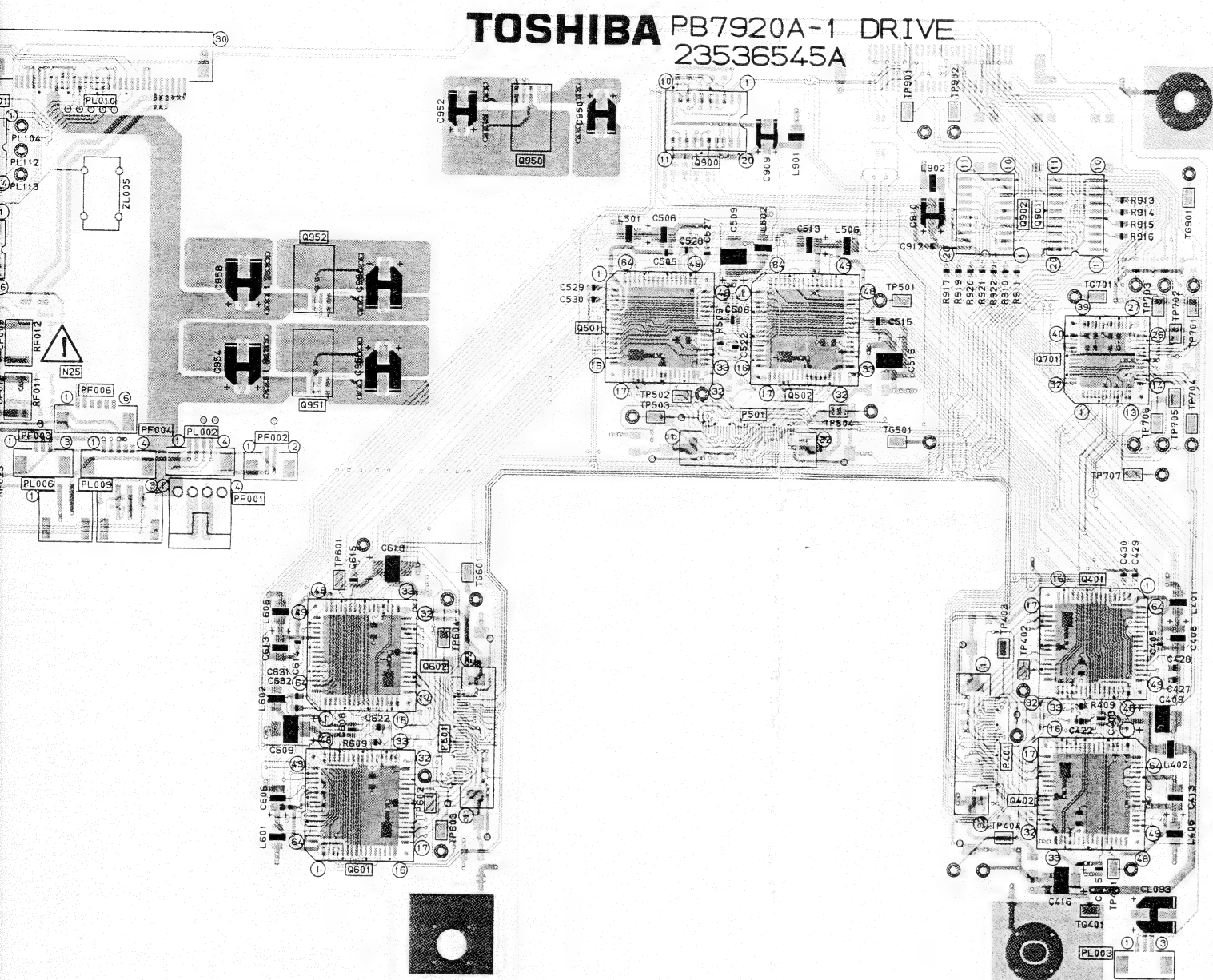


Fig. 2-5-1 U0011 Drive PC Board (Top Side)

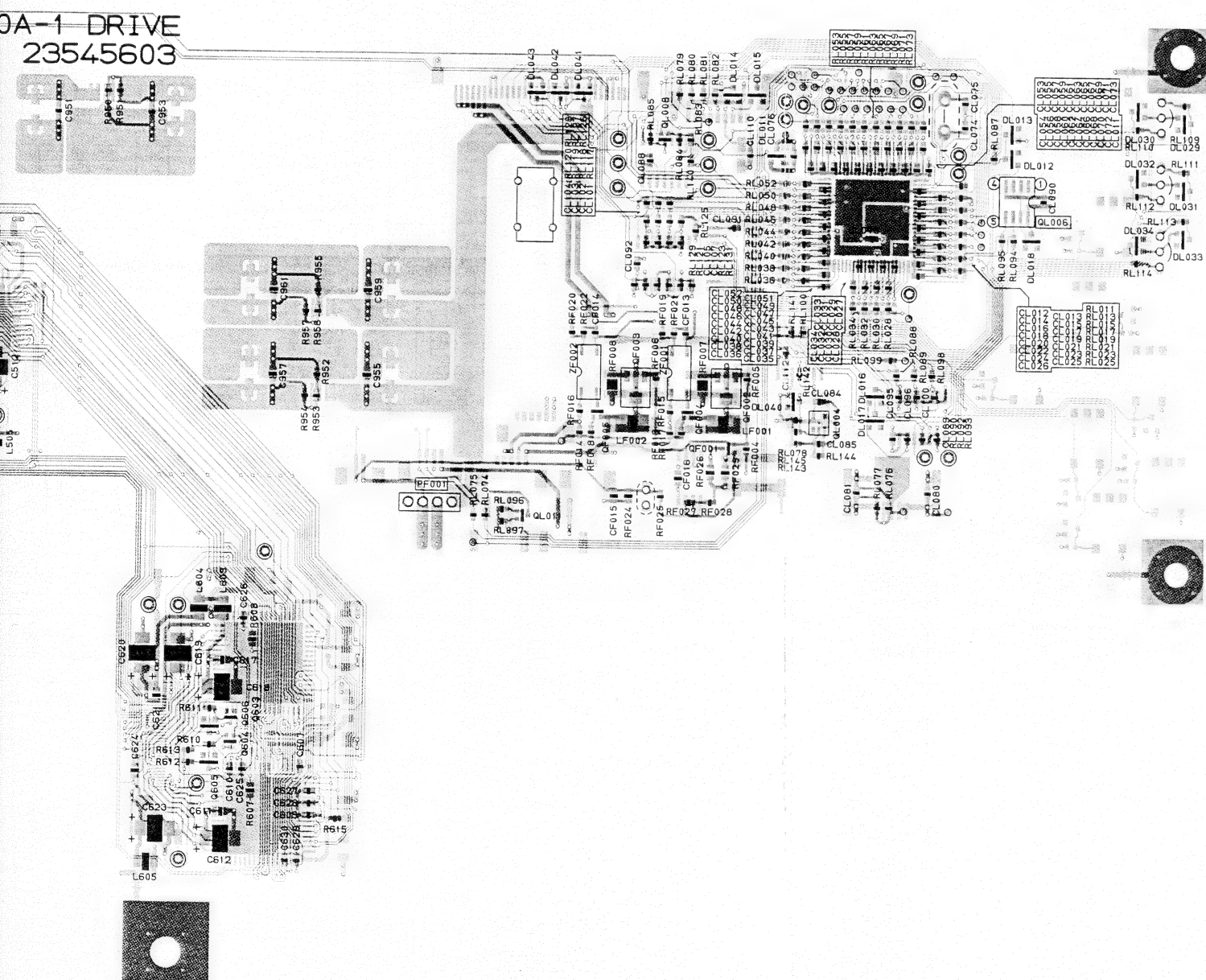
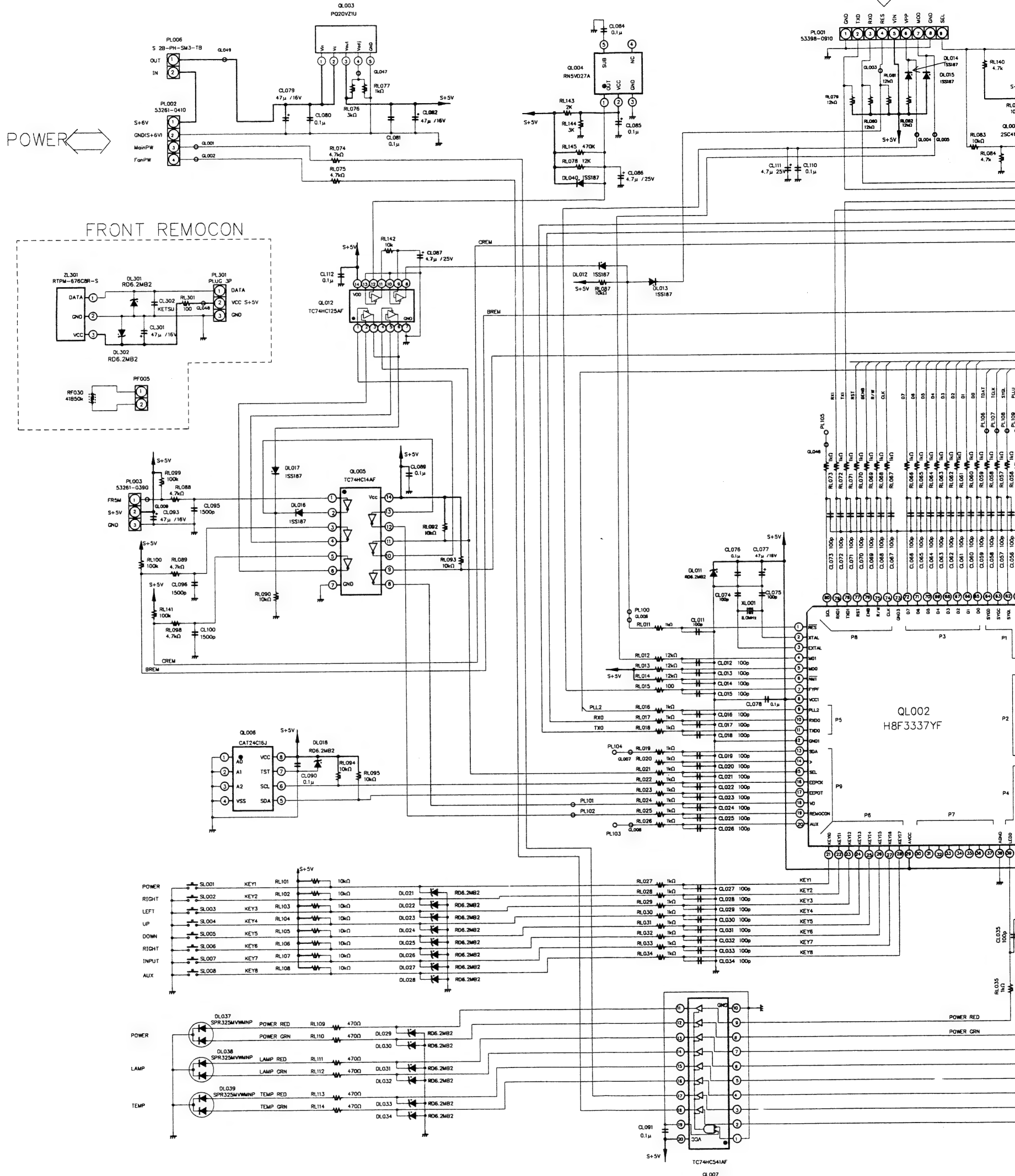
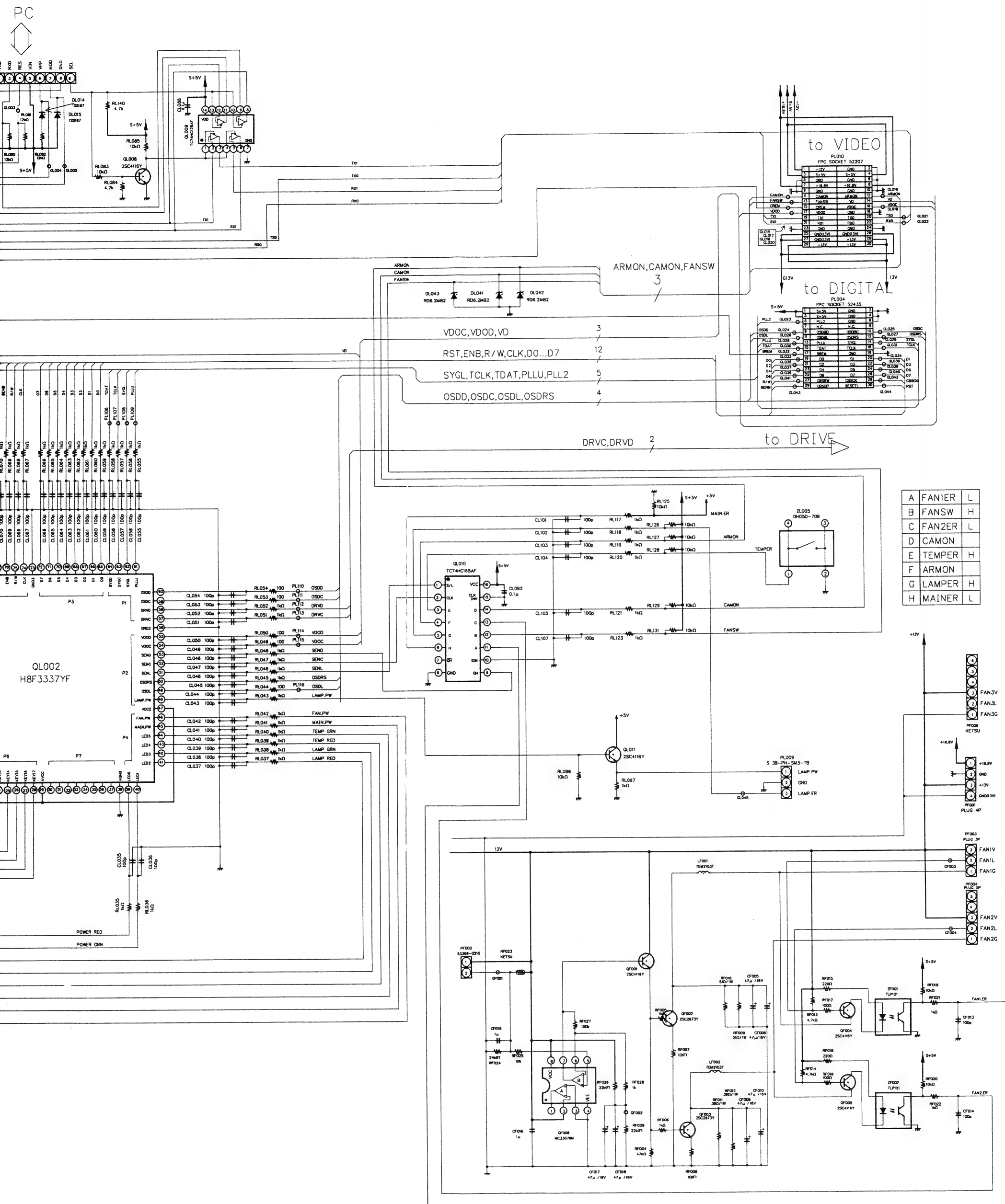


Fig. 2-5-2 U0011 Drive PC Board (Bottom Side)

4-7. Microcomputer, F-REM Circuit Diagram





5-2. Digital PC Board

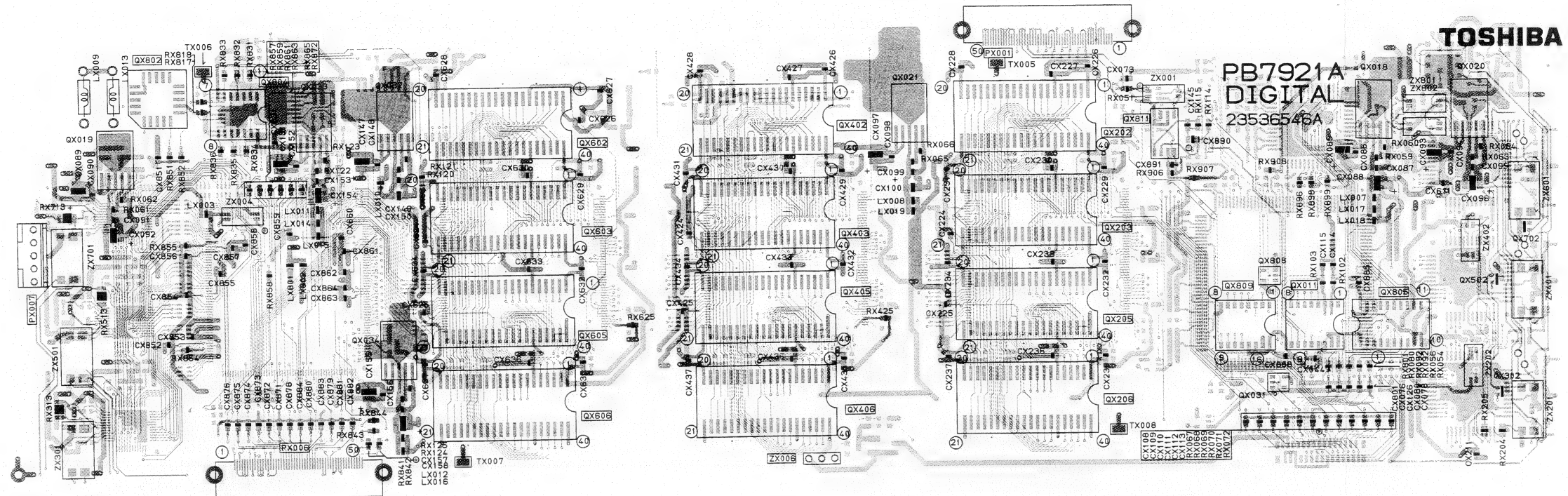


Fig. 2-5-3 U002 Digital PC Board (Top Side)

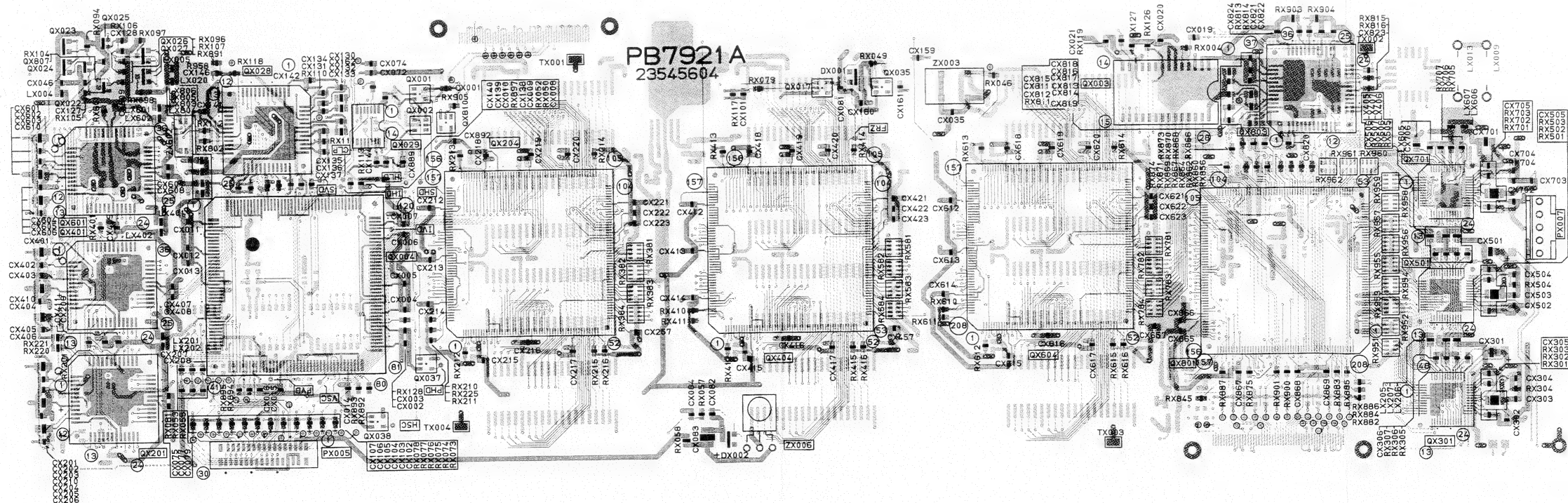


Fig. 2-5-4 U002 Digital PC Board (Bottom Side)

5-3. Video PC Board

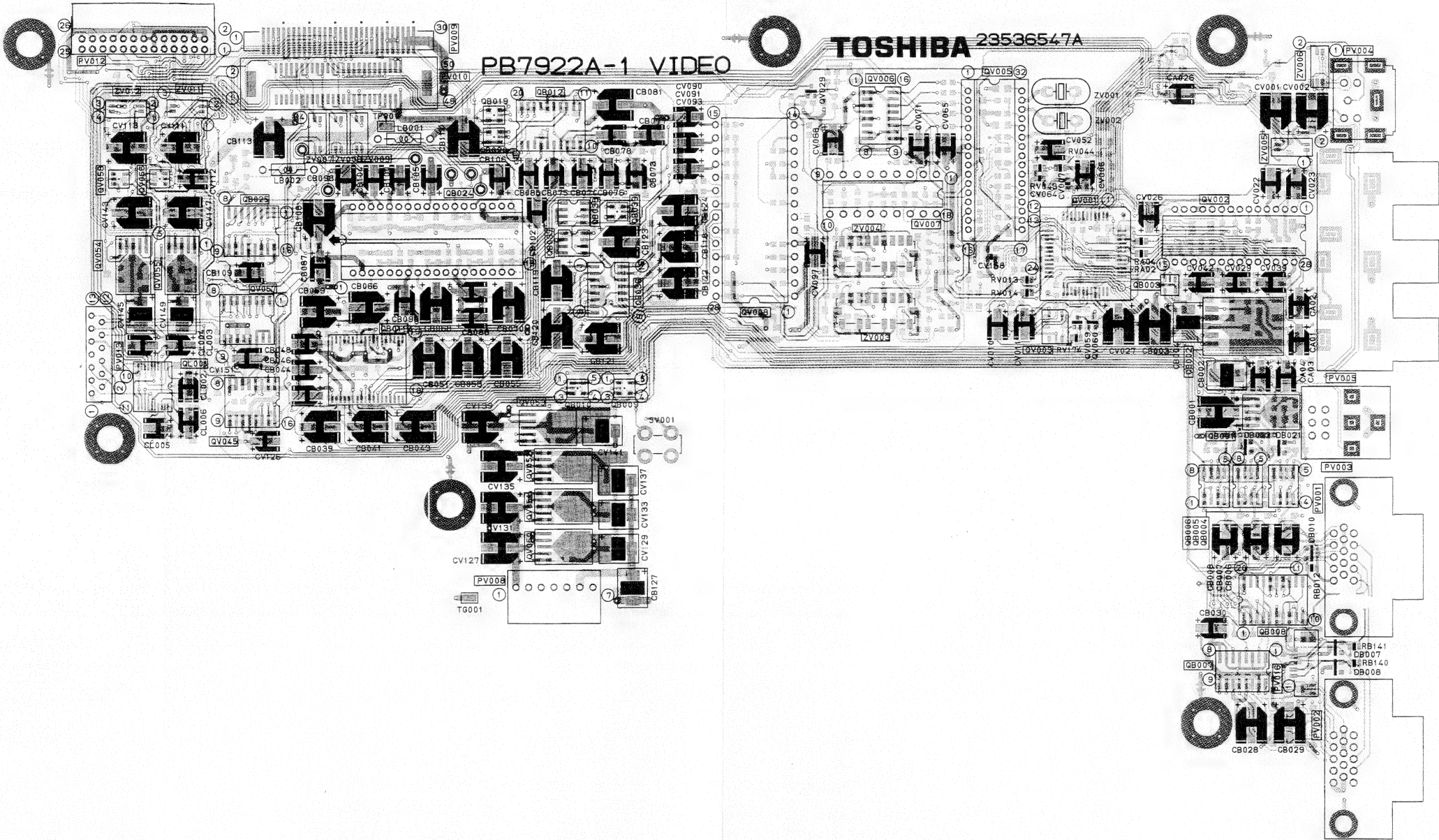


Fig. 2-5-5 U0031 Video PC Board (Top Side)

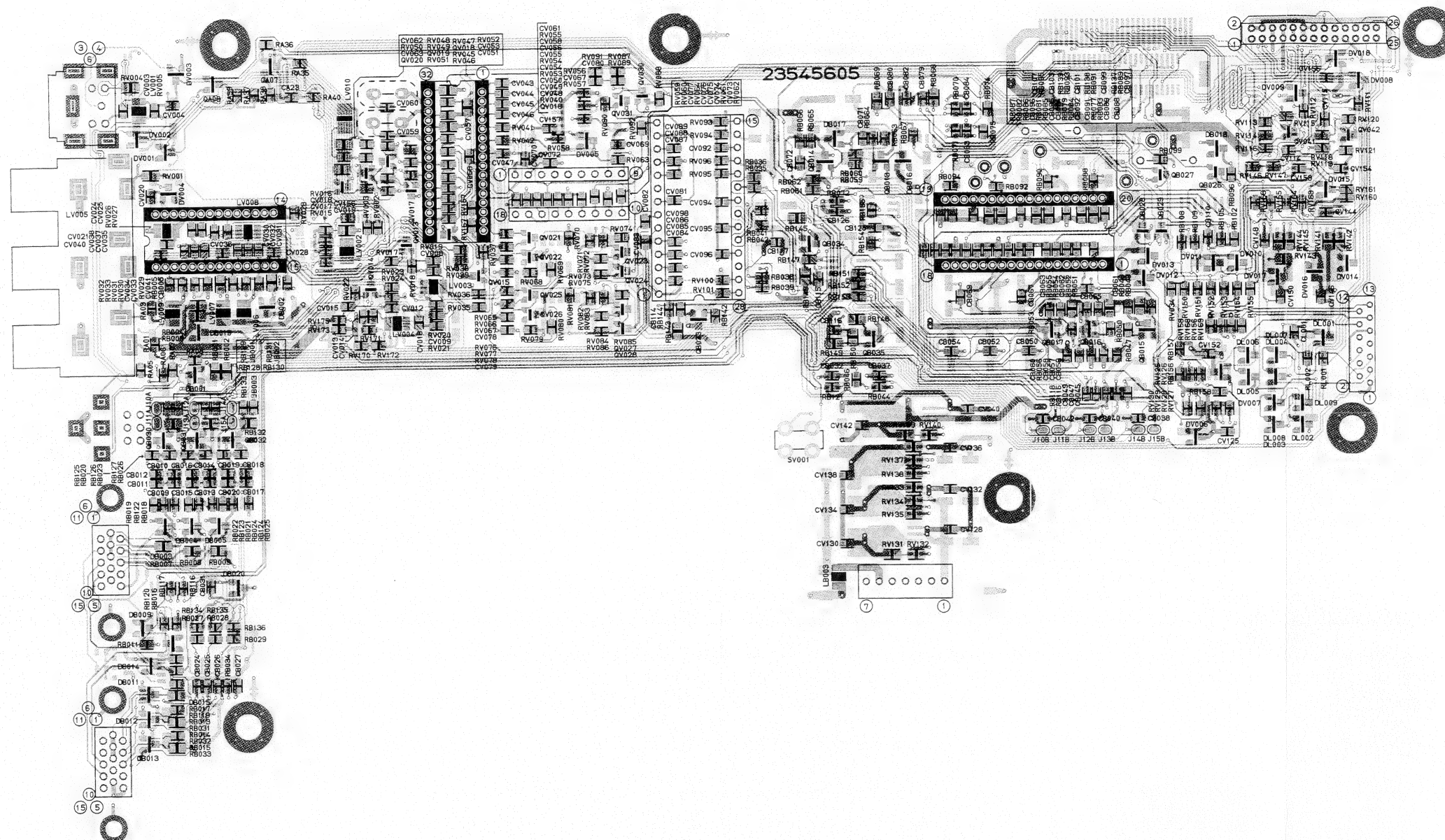


Fig. 2-5-6 U0031 Video PC Board (Bottom Side)

5-4. Audio PC Board

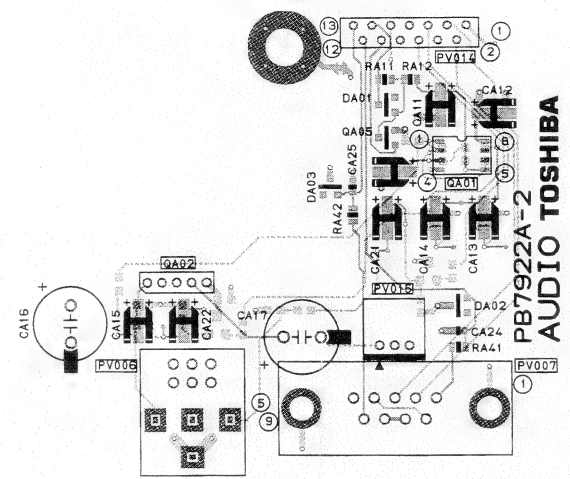


Fig. 2-5-7 U0032 Audio PC Board (Top Side)

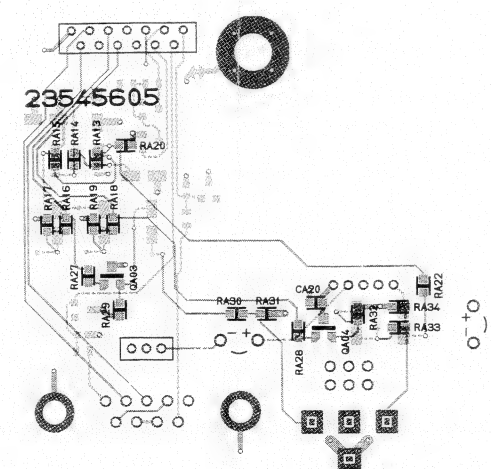


Fig. 2-5-8 U0032 Audio PC Board (Bottom Side)

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SECTION 3 PARTS LIST

SAFETY PRECAUTION

The parts identified by \triangle mark are critical for safety. Replace only with part number specified.

The mounting position of replacement is to be identical with originals.

The substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

NOTICE

The part number must be used when ordering parts in order to assist in processing, be sure to include the model number and description.

Parts marked # are of chip type and mounted on original PC boards.

However, when they are placed for servicing works, use discrete parts listed on the parts list.

ABBREVIATIONS

1. Integrated circuit (IC)

2. Capacitor (Cap)

- Capacitance Tolerance (for Nominal Capacitance more than 10pF)

Table 3-2-1

Symbol	B	C	D	F	G	J	K	M	N
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20	± 30

Symbol	P	Q	T	U	V	W	X	Y	Z
Tolerance %	+ 100 0	+ 30 - 10	+ 50 - 10	+ 75 - 10	+ 20 - 10	+ 100 - 10	+ 40 - 20	+ 150 - 10	+ 80 - 20

Ex. 10 μ F J = 10 μ F $\pm 5\%$

- Capacitance Tolerance (for Nominal Capacitance 10pF or less)

Table 3-2-2

Symbol	B	C	D	F	G
Tolerance pF	± 0.1	± 0.25	± 0.5	± 1	± 2

Ex. 10pF G = 10pF ± 2 pF

3. Resistor (Res)

- Resistance tolerance

Table 3-3-1

Symbol	B	C	D	F	G	J	K	M
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20

Ex. 470 Ω J = 470 Ω $\pm 5\%$

4. EXPLODED VIEWS

4-1. Packing Assembly

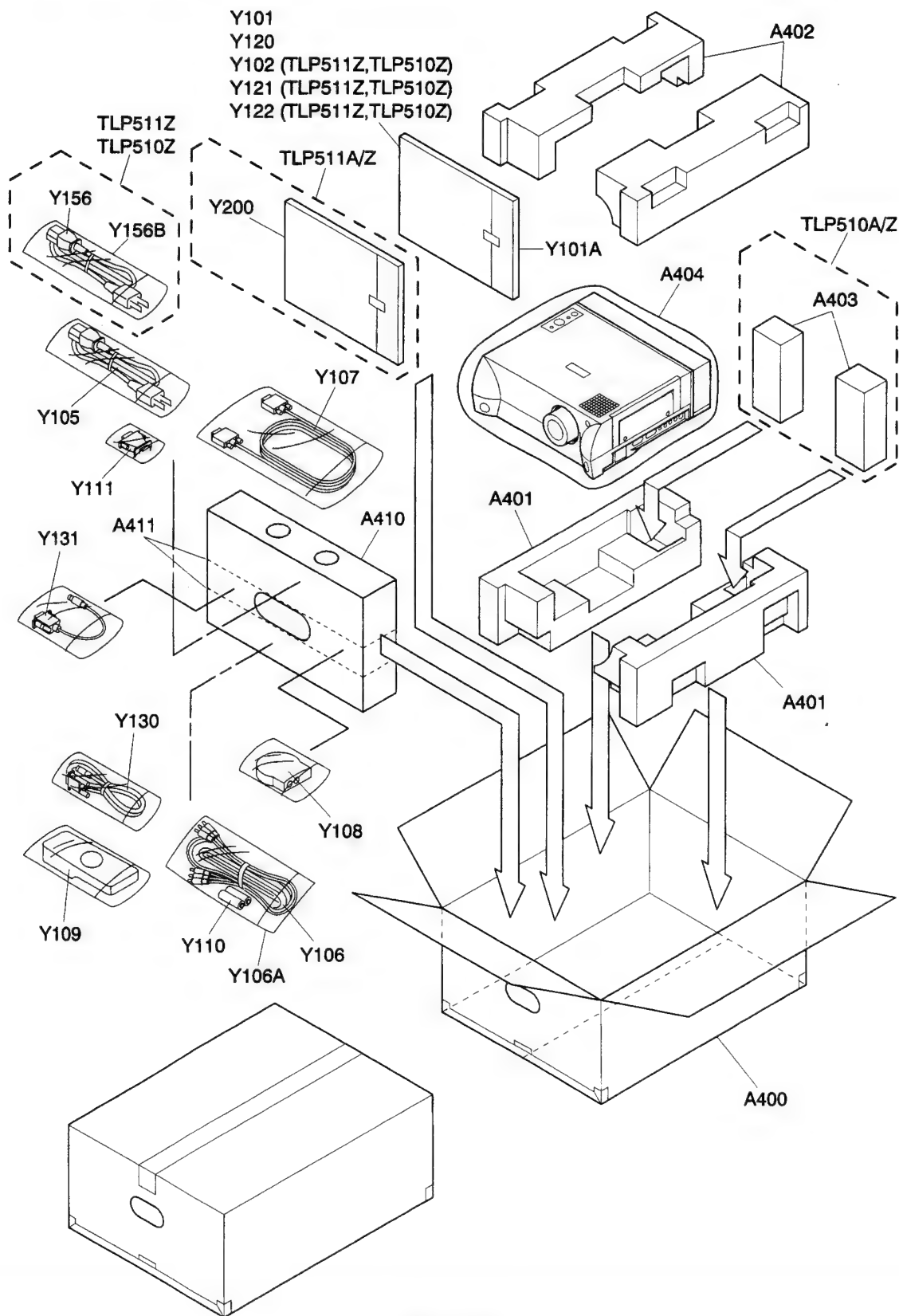


Fig. 3-4-1

4-2. Remote Control Unit

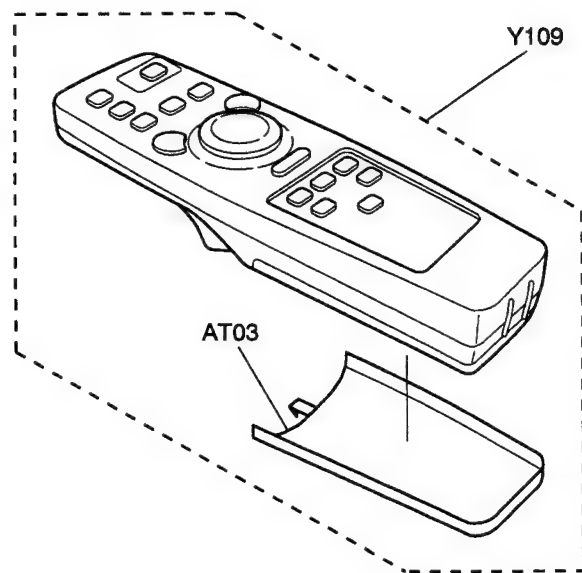


Fig. 3-4-2

4-3. Label Position

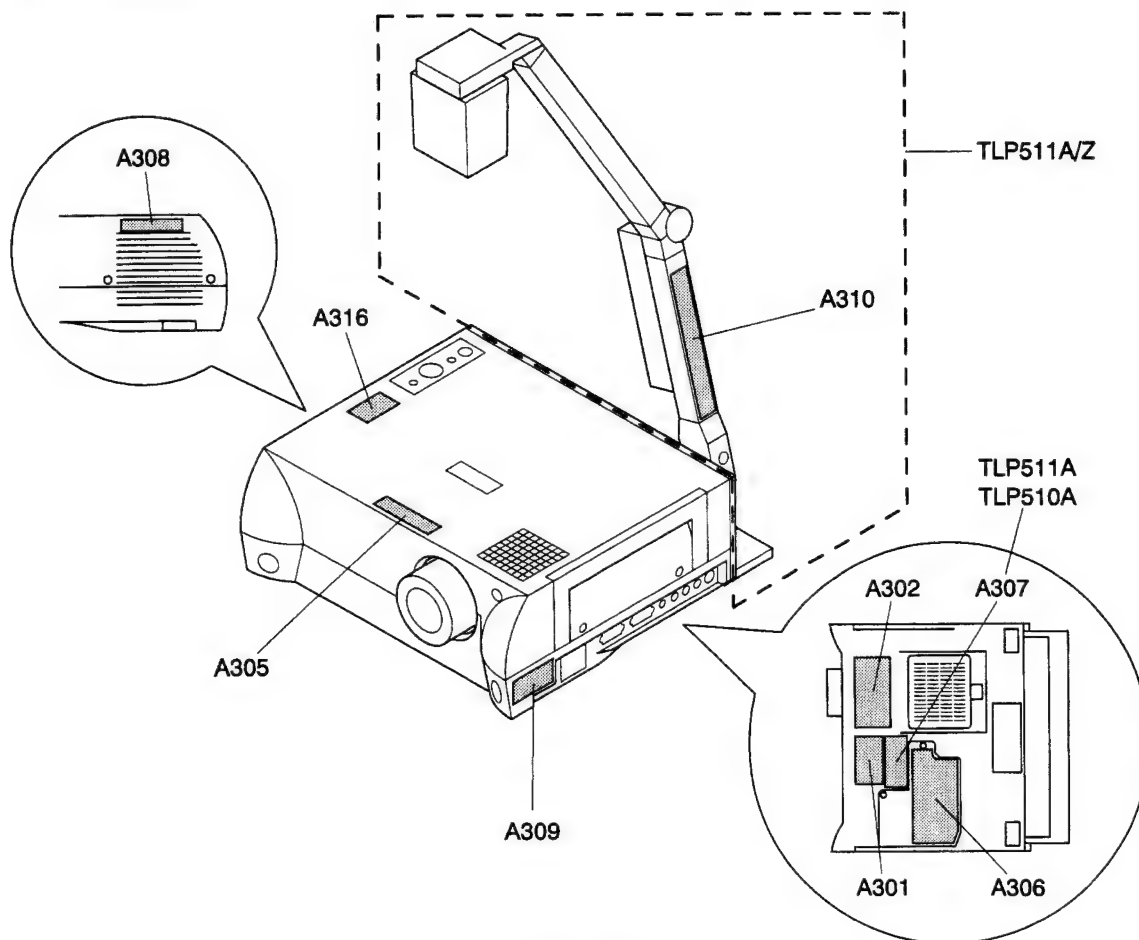


Fig. 3-4-3

4-4. Chassis Assembly

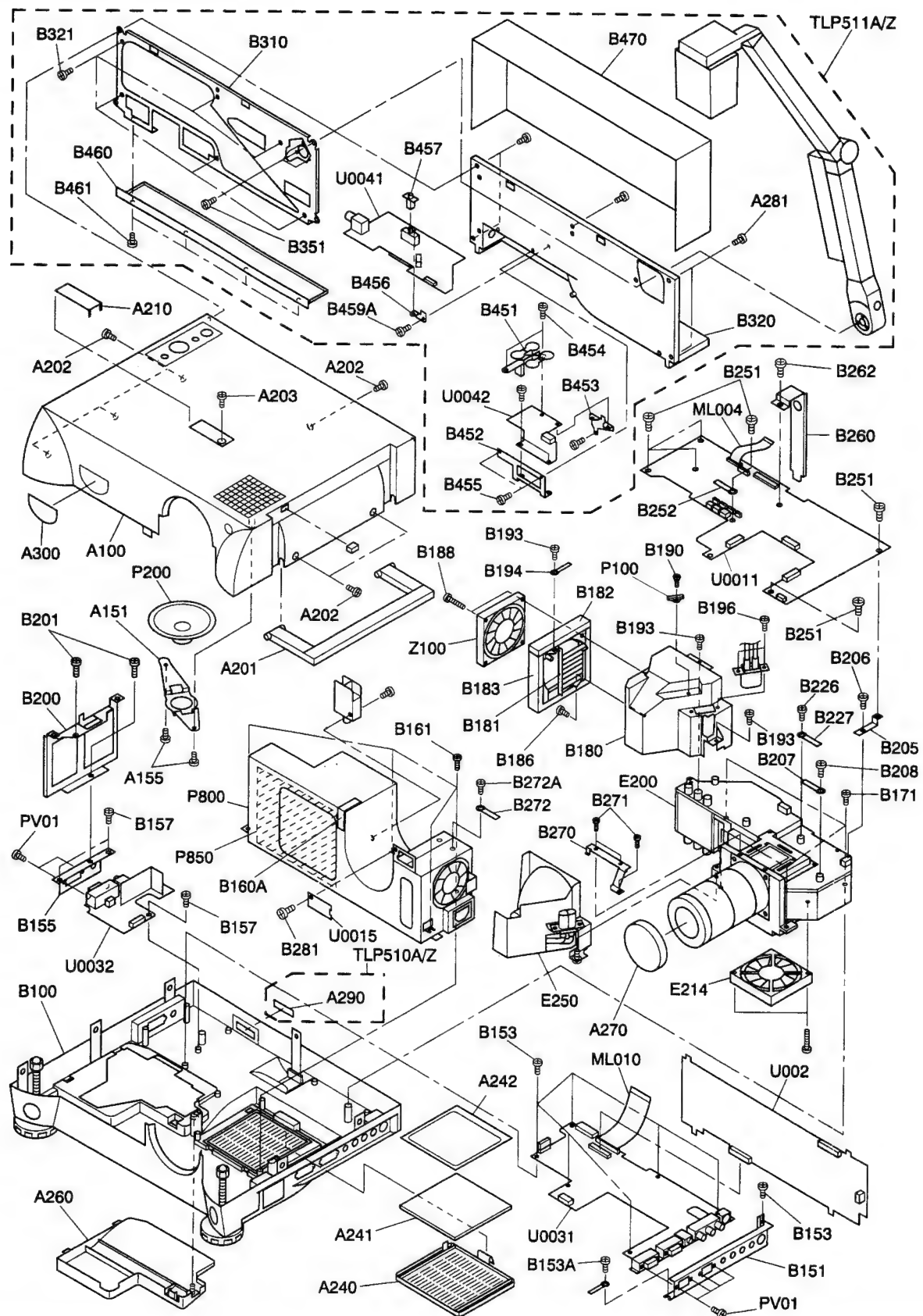


Fig. 3-4-4

4-5. Optical Box Assembly

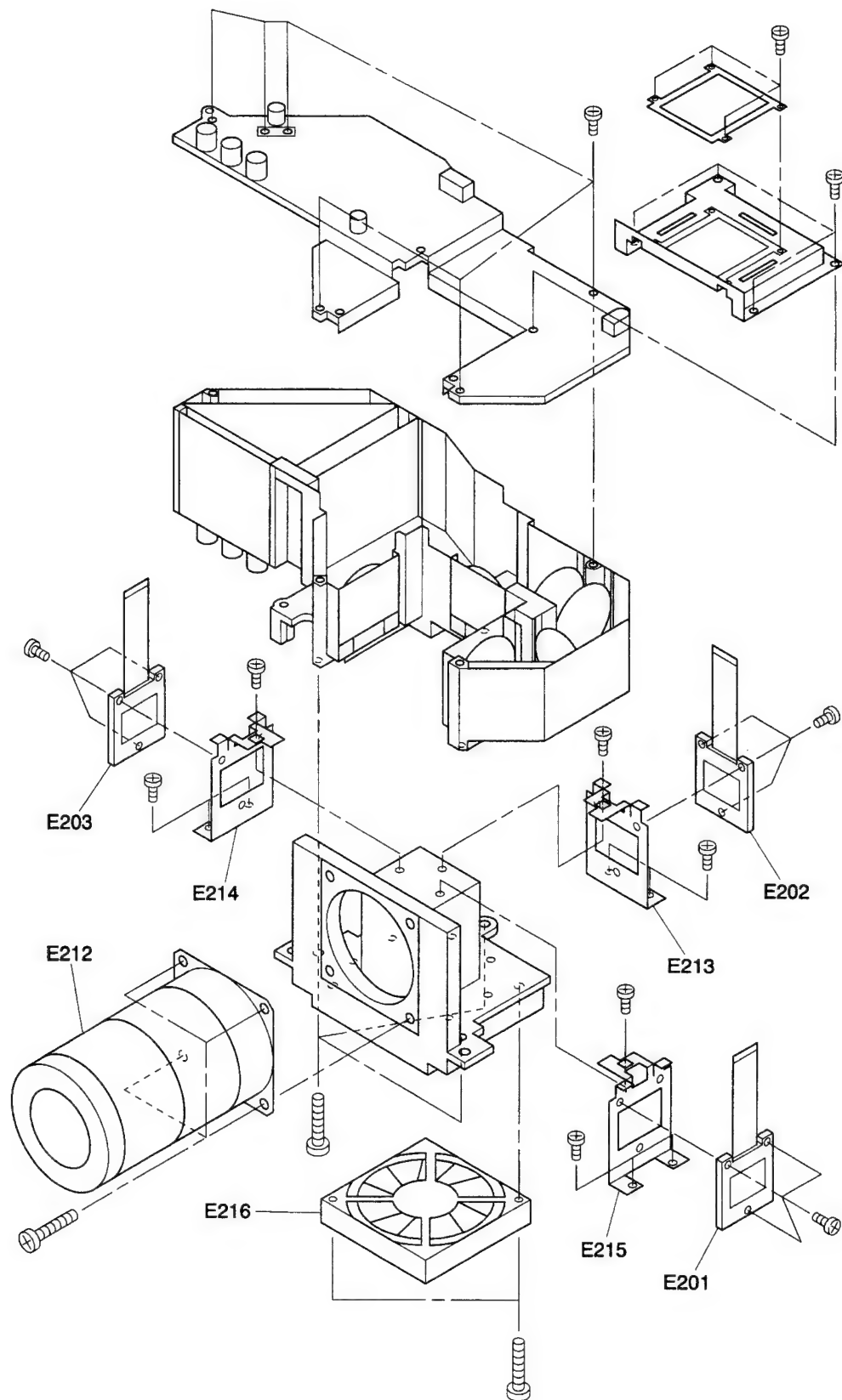


Fig. 3-4-5

5. PARTS LIST

LOCATION NUMBER	PART NUMBER	DESCRIPTION
--------------------	----------------	-------------

- MECHANICAL PARTS (TLP511A/Z) -

△A100	23510269	Top Cover Assy	
A102	70962322	Lens	
A104	70860308	Packing	Filter
A105A	70391878	Screw	1. 7x5. 0mm
A155	23721016	Screw	2W3x6mm
△A201	23975089	Handle Assy	
A202	23723317	Screw	4x8mm
A203	23721308	Screw	3x8mm
A210	23975086	Top Tag Cover	
△A240	23975085	Filter Cover	
△A241	23460902	Air Filter	
A242	23460903	Air Filter, Mesh	
△A260	23975090	Lamp Cover Assy	
A270	23975087	Lens Cap	
A281	23723317	Screw	4x8mm
A300	23560646	Sheet, Front, Tag	
△A301	23560900	Label	Raiting
△A302	23560368	Label	Caution (Rear)
△A305	23560649	Label	Caution (Lens)
△A306	23560650	Label	Caution (Lamp Change)
△A307	23560651	Label	Caution (Interlock)
△A308	23560382	Label	Caution (Hot)
△A309	23560652	Label	Caution (AC Cord)
△A310	23560653	Label	Caution (Arm)
△A316	23550025	Label	Caution (Soft)
A400	23525524	Case	
A401	23935674	Packing	Bottom
A402	23935675	Packing	Top
A404	23943034	Bag	
A410	23525359	Accesssory Box	
A411	23525360	Partition Board	
AT03	23588228	Case (Battery)	
△B100	23510263	Chassis Bottom Assy	
B153	23721016	Screw	2W3x6mm
B153A	70391440	Screw	3x10mm
B157	23721016	Screw	2W3x6mm
B160A	23460943	Screw	10x80x0. 1
B161	23721016	Screw	2W3x6mm
B171	23721014	Screw	4x20mm
B188	23721018	Screw	2W3x25mm
B190	70391440	Screw	3x10mm
B193	23721308	Screw	3x8mm
B196	70391440	Screw	3x10mm
B201	23721308	Screw	3x8mm
B206	23721308	Screw	3x8mm
B208	23721016	Screw	2W3x6mm
B226	23721016	Screw	2W3x6mm
B251	23721308	Screw	3x8mm
B262	23721308	Screw	3x8mm
B271	23721306	Screw	3x6mm
B272A	23721306	Screw	3x6mm
B281	23721306	Screw	3x6mm
B320	23448477	Cover Assy	
B321	23710179	Screw	2. 6x5mm
B330	23470480	Arm Assy	
B361	23464589	Cover	2AA
B362	23464590	Cover	2AB
B365	23464591	Cover	2BA
B366	23464592	Cover	2BB
B373	23723265	Screw	2. 6x5mm
B375	23723264	Screw	2. 6x4mm
B381A	23710176	Screw	2. 6x4mm
B382	23464602	Cover	
B383	23445113	Button	
B384	70391378	Screw	2x3mm
B385	23464603	Cover	SUB
B386	70391378	Screw	2x3mm
B391	23464604	Cover	3J
B415	23710176	Screw	2. 6x4mm
B427	70391378	Screw	2x3mm
B430	23448474	Cover	Camera, Top
B435	23448469	Cover	Camera, Lens

LOCATION NUMBER	PART NUMBER	DESCRIPTION
--------------------	----------------	-------------

B436	70391378	Screw	2x3mm
B444	23723264	Screw	2. 6x4mm
△B445	23464597	Cover	FL Back
B445A	70391378	Screw	2x3mm
△B446	23464638	Cover	FC5
B451	23445112	Button	
B454	23723265	Screw	2. 6x5mm
B455	23710152	Screw	2. 0x3. 5mm
B457	23445115	Cover	SLIDE SW
B459A	23710152	Screw	2. 0x3. 5mm
B460	23448475	Bottom Cover	
B461	23710156	Screw	2. 6x6. 0mm
B470	23448473	Back Cover	
△E200	23796138	Optical Engine	CJ303TA
E201	23301299	LCD Panel	LX023ALW(R)
E202	23301300	LCD Panel	LX023ALX(G)
E203	23301301	LCD Panel	LX023ALV(B)
Q101	70200608	IC	ICX059AK-6
△ML004	23504883	Wire	FFC, 30P
△ML010	23504884	Wire	FFC, 30P
△P100	23144598	Thermal Lead SW	OHD3-105B
P200	23351111	Speaker	SPK-1378
△P800	23796034	Main Power Assy	APS-100N
△P850	23795579	Lamp Driver	
PC302	23905651	Fluorescence Light	FL4N
SC01	23344401	Switch, Detect	
U099A	70391261	Screw	2x4mm
△Y101	23552694	Owners Manual	English
Y101A	23943846	Cover	
△Y105	23176937	Power Cord	125V, 13A
Y106	23368618	Pin Cable	3P
Y106A	23943855	Cover	
Y108	23306241	Remote Sensor Unit	
Y109	23306240	Remote Control Unit	
Y111	23368679	MAC Adaptor	
Y120	23552702	Quick Card	English
Y130	23368676	Cable	DSUB, 9P
Y131	23368677	Cable	DIN4P-DSUB9P
Y200	23460918	Document Sheet	
△Z100	23125481	Fan	DC12V

- DIFFERENCE LIST (TLP511Z) -

△A260	23975092	Lamp Cover Assy	
△A301	23560902	Label	Raiting
△A307	-----		
A400	23525526	Case	
B430	23448488	Cover	Camera, Top
B435	23448489	Cover	Camera, Lens
△Y101	23552696	Owners Manual	English
△Y102	23552697	Owners Manual	French/German
△Y105	23176002	Power Cord	125V, 13A
Y121	23552704	Quick Card	French
Y122	23552705	Quick Card	German
Y156	23372019	Power Cord	UK
Y156B	23943846	Cover	

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
- MECHANICAL PARTS (TLP510A/Z) -			- DIFFERENCE LIST (TLP510Z) -		
△A100	23510269	Top Cover Assy	△A260	23975092	Lamp Cover Assy
A104	70860308	Packing	△A301	23560905	Label Raiting
A155	23721016	Screw 2W3x6mm	△A307	-----	
△A201	23975089	Handle Assy	A400	23525529	Case
A202	23723317	Screw 4x8mm	△Y101	23552669	Owners Manual English
A203	23721308	Screw 3x8mm	△Y102	23552697	Owners Manual French/German
A210	23975086	Top Tag Cover	△Y105	23176002	Power Cord 125V, 13A
△A240	23975085	Filter Cover	Y121	23552704	Quick Card French
△A241	23460902	Air Filter	Y122	23552705	Quick Card German
A242	23460903	Air Filter, Mesh	Y156	23372019	Power Cord UK
△A260	23975090	Lamp Cover Assy	Y156B	23943846	Cover
A270	23975087	Lens Cap			
A290	23460915	Sheet			
A300	23560690	Sheet, Front, Tag			
△A301	23560903	Label Rating			
△A302	23560368	Label Caution(Rear)			
△A305	23560649	Label Caution(Lens)			
△A306	23560650	Label Caution(Lamp Change)			
△A307	23560651	Label Caution(Interlock)			
△A308	23560382	Label Caution(Hot)			
△A309	23560652	Label Caution(AC Cord)			
△A316	23550025	Label Caution(Soft)			
A400	23525527	Case			
A401	23935674	Packing Bottom			
A402	23935675	Packing Top			
A403	23935706	Packing, Sub			
A404	23943038	Bag			
A410	23525359	Accesssory Box			
A411	23525360	Partition Board			
AT03	23588228	Case(Battery)			
△B100	23510263	Chassis Bottom Assy			
B153	23721016	Screw 2W3x6mm			
B153A	70391440	Screw 3x10mm			
B157	23721016	Screw 2W3x6mm			
B160A	23460943	Screw 10x80x0.1			
B161	23721016	Screw 2W3x6mm			
B171	23721014	Screw 4x20mm			
B188	23721018	Screw 2W3x25mm			
B190	70391440	Screw 3x10mm			
B193	23721308	Screw 3x8mm			
B196	70391440	Screw 3x10mm			
B201	23721308	Screw 3x8mm			
B206	23721308	Screw 3x8mm			
B208	23721016	Screw 2W3x6mm			
B226	23721016	Screw 2W3x6mm			
B251	23721308	Screw 3x8mm			
B262	23721308	Screw 3x8mm			
B271	23721306	Screw 3x6mm			
B272A	23721306	Screw 3x6mm			
B281	23721306	Screw 3x6mm			
△E200	23796138	Optical Engine CJ303TA			
E201	23301299	LCD Panel LCX023ALW(R)			
E202	23301300	LCD Panel LCX023ALX(G)			
E203	23301301	LCD Panel LCX023ALV(B)			
△ML004	23504883	Wire FFC, 30P			
△ML010	23504884	Wire FFC, 30P			
P100	23144598	Thermal Lead SW OHD3-105B			
P200	23351111	Speaker SPK-1378			
△P800	23796034	Main Power Assy APS-100N			
△P850	23795579	Lamp Driver			
△Y101	23552694	Owners Manual English			
Y101A	23943846	Cover			
△Y105	23176937	Power Cord 125V, 13A			
Y106	23368618	Pin Cable 3P			
Y106A	23943855	Cover			
Y108	23306241	Remote Sensor Unit			
△Y109	23306251	Remote Control Unit			
Y111	23368679	MAC Adaptor			
Y120	23552702	Quick Card English			
Y130	23368676	Cable DSUB, 9P			
Y131	23368677	Cable DIN4P-DSUB9P			
△Z100	23125481	Fan DC12V			

LOCATION NUMBER	PART NUMBER	DESCRIPTION
- ELECTRICAL PARTS -		
U0011	23781603	PC Board Assy Drive - INTEGRATED CIRCUITS -
Q401	23906360	IC CXA2112R
Q402	23906360	IC CXA2112R
Q501	23906360	IC CXA2112R
Q502	23906360	IC CXA2112R
Q601	23906360	IC CXA2112R
Q602	23906360	IC CXA2112R
Q701	23906361	IC CXA2111R
Q900	23906224	IC M62399FP
Q901	B0489227	IC TC74ACT244F
Q902	B0489227	IC TC74ACT244F
Q950	70129738	IC PQ20VZ1U
Q951	70129738	IC PQ20VZ1U
Q952	70129738	IC PQ20VZ1U
QF006	23319214	IC MC33078M
QL003	70129738	IC PQ20VZ1U
QL004	70200430	IC RN5VD27A
QL005	23904881	IC MC74HC14AF
QL006	23906209	IC CAT24C16J
QL007	70129902	IC MC74HC541FEL
QL009	B0488392	IC TC74HC125AF
QL010	70129907	IC MC74HC165F
QL012	B0488392	IC TC74HC125AF
- TRANSISTORS -		
Q403	A6365620	Transistor, Chip 2SC4116-Y
Q404	A6549570	Transistor, Chip 2SA1586-Y
Q405	A6358620	Transistor, Chip 2SC3265-Y
Q406	A6546370	Transistor, Chip 2SA1298-Y
Q503	A6365620	Transistor, Chip 2SC4116-Y
Q504	A6549570	Transistor, Chip 2SA1586-Y
Q505	A6358620	Transistor, Chip 2SC3265-Y
Q506	A6546370	Transistor, Chip 2SA1298-Y
Q603	A6365620	Transistor, Chip 2SC4116-Y
Q604	A6549570	Transistor, Chip 2SA1586-Y
Q605	A6358620	Transistor, Chip 2SC3265-Y
Q606	A6546370	Transistor, Chip 2SA1298-Y
QF001	A6365620	Transistor, Chip 2SC4116-Y
QF002	A6341974	Transistor, Chip 2SC2873-Y
QF003	A6341974	Transistor, Chip 2SC2873-Y
QF004	A6365620	Transistor, Chip 2SC4116-Y
QF005	A6365620	Transistor, Chip 2SC4116-Y
QL008	A6365620	Transistor, Chip 2SC4116-Y
QL011	A6365620	Transistor, Chip 2SC4116-Y
- DIODES -		
DL011	23118313	Diode, Chip RD6. 2M
DL012	A7150800	Diode, Chip 1SS187
DL013	A7150800	Diode, Chip 1SS187
DL014	A7150800	Diode, Chip 1SS187
DL015	A7150800	Diode, Chip 1SS187
DL016	A7150800	Diode, Chip 1SS187
DL017	A7150800	Diode, Chip 1SS187
DL018	23118313	Diode, Chip RD6. 2M
DL021	23118313	Diode, Chip RD6. 2M
DL022	23118313	Diode, Chip RD6. 2M
DL023	23118313	Diode, Chip RD6. 2M
DL024	23118313	Diode, Chip RD6. 2M
DL025	23118313	Diode, Chip RD6. 2M
DL026	23118313	Diode, Chip RD6. 2M
DL027	23118313	Diode, Chip RD6. 2M
DL028	23118313	Diode, Chip RD6. 2M
DL029	23118313	Diode, Chip RD6. 2M
DL030	23118313	Diode, Chip RD6. 2M
DL031	23118313	Diode, Chip RD6. 2M
DL032	23118313	Diode, Chip RD6. 2M
DL033	23118313	Diode, Chip RD6. 2M
DL034	23118313	Diode, Chip RD6. 2M
DL037	23358535	Diode, LED SPR325MVWMNP
DL038	23358535	Diode, LED SPR325MVWMNP
DL039	23358535	Diode, LED SPR325MVWMNP
DL040	A7150800	Diode, Chip 1SS187

LOCATION NUMBER	PART NUMBER	DESCRIPTION
DL041	23118313	Diode, Chip RD6. 2M
DL042	23118313	Diode, Chip RD6. 2M
DL043	23118313	Diode, Chip RD6. 2M
- COILS -		
L401	23245847	Coil, Chip TRF4330CC
L402	23245847	Coil, Chip TRF4330CC
L403	23245847	Coil, Chip TRF4330CC
L404	23245847	Coil, Chip TRF4330CC
L405	23245847	Coil, Chip TRF4330CC
L406	23245847	Coil, Chip TRF4330CC
L501	23245847	Coil, Chip TRF4330CC
L502	23245847	Coil, Chip TRF4330CC
L503	23245847	Coil, Chip TRF4330CC
L504	23245847	Coil, Chip TRF4330CC
L505	23245847	Coil, Chip TRF4330CC
L506	23245847	Coil, Chip TRF4330CC
L601	23245847	Coil, Chip TRF4330CC
L602	23245847	Coil, Chip TRF4330CC
L603	23245847	Coil, Chip TRF4330CC
L604	23245847	Coil, Chip TRF4330CC
L605	23245847	Coil, Chip TRF4330CC
L606	23245847	Coil, Chip TRF4330CC
L701	23245847	Coil, Chip TRF4330CC
L901	23245847	Coil, Chip TRF4330CC
L902	23245847	Coil, Chip TRF4330CC
LF001	23103864	Coil, Chip TEM2103T
LF002	23103864	Coil, Chip TEM2103T
- CAPACITORS -		
C405	24092538	Cap, Chip 1 μ F Z 10V
C406	24088085	Cap, Chip 22 μ F M 10V
C407	24100103	Cap, Chip 0. 01 μ F Z 50V
C408	24092294	Cap, Chip 0. 33 μ F Z 16V
C409	24295106	Cap, Chip 10 μ F M 25V
C410	24092399	Cap, Chip 0. 1 μ F Z 16V
C411	24092294	Cap, Chip 0. 33 μ F Z 16V
C412	24295106	Cap, Chip 10 μ F M 25V
C413	24088085	Cap, Chip 22 μ F M 10V
C414	24092538	Cap, Chip 1 μ F Z 10V
C415	24092294	Cap, Chip 0. 33 μ F Z 16V
C416	24295106	Cap, Chip 10 μ F M 25V
C417	24092294	Cap, Chip 0. 33 μ F Z 16V
C418	24295106	Cap, Chip 10 μ F M 25V
C419	24293226	Cap, Chip 22 μ F M 16V
C420	24295106	Cap, Chip 10 μ F M 25V
C421	24092294	Cap, Chip 0. 33 μ F Z 16V
C423	24295106	Cap, Chip 10 μ F M 25V
C424	24092294	Cap, Chip 0. 33 μ F Z 16V
C425	24092399	Cap, Chip 0. 1 μ F Z 16V
C426	24092399	Cap, Chip 0. 1 μ F Z 16V
C427	24092399	Cap, Chip 0. 1 μ F Z 16V
C428	24092399	Cap, Chip 0. 1 μ F Z 16V
C429	24092399	Cap, Chip 0. 1 μ F Z 16V
C430	24092399	Cap, Chip 0. 1 μ F Z 16V
C431	24092399	Cap, Chip 0. 1 μ F Z 16V
C432	24092399	Cap, Chip 0. 1 μ F Z 16V
C505	24092538	Cap, Chip 1 μ F Z 10V
C506	24088085	Cap, Chip 22 μ F M 10V
C507	24100103	Cap, Chip 0. 01 μ F Z 50V
C508	24092294	Cap, Chip 0. 33 μ F Z 16V
C509	24295106	Cap, Chip 10 μ F M 25V
C510	24092399	Cap, Chip 0. 1 μ F Z 16V
C511	24092294	Cap, Chip 0. 33 μ F Z 16V
C512	24295106	Cap, Chip 10 μ F M 25V
C513	24088085	Cap, Chip 22 μ F M 10V
C514	24092538	Cap, Chip 1 μ F Z 10V
C515	24092294	Cap, Chip 0. 33 μ F Z 16V
C516	24295106	Cap, Chip 10 μ F M 25V
C517	24092294	Cap, Chip 0. 33 μ F Z 16V
C518	24295106	Cap, Chip 10 μ F M 25V
C519	24293226	Cap, Chip 22 μ F M 16V
C520	24295106	Cap, Chip 10 μ F M 25V
C521	24092294	Cap, Chip 0. 33 μ F Z 16V
C523	24295106	Cap, Chip 10 μ F M 25V
C524	24092294	Cap, Chip 0. 33 μ F Z 16V
C525	24092399	Cap, Chip 0. 1 μ F Z 16V

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
C526	24092399	Cap, Chip	0.1 μ F	Z 16V	CF006	24619102	Cap, Chip	47 μ F	M 16V
C527	24092399	Cap, Chip	0.1 μ F	Z 16V	CF009	24619102	Cap, Chip	47 μ F	M 16V
C528	24092399	Cap, Chip	0.1 μ F	Z 16V	CF010	24619102	Cap, Chip	47 μ F	M 16V
C529	24092399	Cap, Chip	0.1 μ F	Z 16V	CF013	24105101	Cap, Chip	100pF	J 50V
C530	24092399	Cap, Chip	0.1 μ F	Z 16V	CF014	24105101	Cap, Chip	100pF	J 50V
C531	24092399	Cap, Chip	0.1 μ F	Z 16V	CF015	24092441	Cap, Chip	1 μ F	Z 16V
C532	24092399	Cap, Chip	0.1 μ F	Z 16V	CF016	24092441	Cap, Chip	1 μ F	Z 16V
C605	24092538	Cap, Chip	1 μ F	Z 10V	CF017	24619102	Cap, Chip	47 μ F	M 16V
C606	24088085	Cap, Chip	22 μ F	M 10V	CF018	24619102	Cap, Chip	47 μ F	M 16V
C607	24100103	Cap, Chip	0.01 μ F	Z 50V	CL011	24105101	Cap, Chip	100pF	J 50V
C608	24092294	Cap, Chip	0.33 μ F	Z 16V	CL012	24105101	Cap, Chip	100pF	J 50V
C609	24295106	Cap, Chip	10 μ F	M 25V	CL013	24105101	Cap, Chip	100pF	J 50V
C610	24092399	Cap, Chip	0.1 μ F	Z 16V	CL014	24105101	Cap, Chip	100pF	J 50V
C611	24092294	Cap, Chip	0.33 μ F	Z 16V	CL015	24105101	Cap, Chip	100pF	J 50V
C612	24295106	Cap, Chip	10 μ F	M 25V	CL016	24105101	Cap, Chip	100pF	J 50V
C613	24088085	Cap, Chip	22 μ F	M 10V	CL017	24105101	Cap, Chip	100pF	J 50V
C614	24092538	Cap, Chip	1 μ F	Z 10V	CL018	24105101	Cap, Chip	100pF	J 50V
C615	24092294	Cap, Chip	0.33 μ F	Z 16V	CL019	24105101	Cap, Chip	100pF	J 50V
C616	24295106	Cap, Chip	10 μ F	M 25V	CL020	24105101	Cap, Chip	100pF	J 50V
C617	24092294	Cap, Chip	0.33 μ F	Z 16V	CL021	24105101	Cap, Chip	100pF	J 50V
C618	24295106	Cap, Chip	10 μ F	M 25V	CL022	24105101	Cap, Chip	100pF	J 50V
C619	24293226	Cap, Chip	22 μ F	M 16V	CL023	24105101	Cap, Chip	100pF	J 50V
C620	24295106	Cap, Chip	10 μ F	M 25V	CL024	24105101	Cap, Chip	100pF	J 50V
C621	24092294	Cap, Chip	0.33 μ F	Z 16V	CL025	24105101	Cap, Chip	100pF	J 50V
C623	24295106	Cap, Chip	10 μ F	M 25V	CL026	24105101	Cap, Chip	100pF	J 50V
C624	24092294	Cap, Chip	0.33 μ F	Z 16V	CL027	24105101	Cap, Chip	100pF	J 50V
C625	24092399	Cap, Chip	0.1 μ F	Z 16V	CL028	24105101	Cap, Chip	100pF	J 50V
C626	24092399	Cap, Chip	0.1 μ F	Z 16V	CL029	24105101	Cap, Chip	100pF	J 50V
C627	24092399	Cap, Chip	0.1 μ F	Z 16V	CL030	24105101	Cap, Chip	100pF	J 50V
C628	24092399	Cap, Chip	0.1 μ F	Z 16V	CL031	24105101	Cap, Chip	100pF	J 50V
C629	24092399	Cap, Chip	0.1 μ F	Z 16V	CL032	24105101	Cap, Chip	100pF	J 50V
C630	24092399	Cap, Chip	0.1 μ F	Z 16V	CL033	24105101	Cap, Chip	100pF	J 50V
C631	24092399	Cap, Chip	0.1 μ F	Z 16V	CL034	24105101	Cap, Chip	100pF	J 50V
C632	24092399	Cap, Chip	0.1 μ F	Z 16V	CL035	24105101	Cap, Chip	100pF	J 50V
C701	24092441	Cap, Chip	1 μ F	Z 16V	CL036	24105101	Cap, Chip	100pF	J 50V
C702	24092441	Cap, Chip	1 μ F	Z 16V	CL037	24105101	Cap, Chip	100pF	J 50V
C703	24092441	Cap, Chip	1 μ F	Z 16V	CL038	24105101	Cap, Chip	100pF	J 50V
C704	24092538	Cap, Chip	1 μ F	Z 10V	CL039	24105101	Cap, Chip	100pF	J 50V
C705	24088080	Cap, Chip	33 μ F	M 10V	CL040	24105101	Cap, Chip	100pF	J 50V
C706	24092538	Cap, Chip	1 μ F	Z 10V	CL041	24105101	Cap, Chip	100pF	J 50V
C707	24088080	Cap, Chip	33 μ F	M 10V	CL042	24105101	Cap, Chip	100pF	J 50V
C709	24092399	Cap, Chip	0.1 μ F	Z 16V	CL043	24105101	Cap, Chip	100pF	J 50V
C710	24092399	Cap, Chip	0.1 μ F	Z 16V	CL044	24105101	Cap, Chip	100pF	J 50V
C711	24092399	Cap, Chip	0.1 μ F	Z 16V	CL045	24105101	Cap, Chip	100pF	J 50V
C712	24092399	Cap, Chip	0.1 μ F	Z 16V	CL046	24105101	Cap, Chip	100pF	J 50V
C713	24092399	Cap, Chip	0.1 μ F	Z 16V	CL047	24105101	Cap, Chip	100pF	J 50V
C714	24092399	Cap, Chip	0.1 μ F	Z 16V	CL048	24105101	Cap, Chip	100pF	J 50V
C715	24092399	Cap, Chip	0.1 μ F	Z 16V	CL049	24105101	Cap, Chip	100pF	J 50V
C900	24092399	Cap, Chip	0.1 μ F	Z 16V	CL050	24105101	Cap, Chip	100pF	J 50V
C901	24092399	Cap, Chip	0.1 μ F	Z 16V	CL051	24105101	Cap, Chip	100pF	J 50V
C902	24092399	Cap, Chip	0.1 μ F	Z 16V	CL052	24105101	Cap, Chip	100pF	J 50V
C903	24092399	Cap, Chip	0.1 μ F	Z 16V	CL053	24105101	Cap, Chip	100pF	J 50V
C904	24092399	Cap, Chip	0.1 μ F	Z 16V	CL054	24105101	Cap, Chip	100pF	J 50V
C905	24092399	Cap, Chip	0.1 μ F	Z 16V	CL055	24105101	Cap, Chip	100pF	J 50V
C906	24092399	Cap, Chip	0.1 μ F	Z 16V	CL056	24105101	Cap, Chip	100pF	J 50V
C907	24092399	Cap, Chip	0.1 μ F	Z 16V	CL057	24105101	Cap, Chip	100pF	J 50V
C908	24092538	Cap, Chip	1 μ F	Z 10V	CL058	24105101	Cap, Chip	100pF	J 50V
C909	24619096	Cap, Chip	22 μ F	M 6.3V	CL059	24105101	Cap, Chip	100pF	J 50V
C910	24619096	Cap, Chip	22 μ F	M 6.3V	CL060	24105101	Cap, Chip	100pF	J 50V
C911	24092538	Cap, Chip	1 μ F	Z 10V	CL061	24105101	Cap, Chip	100pF	J 50V
C912	24092538	Cap, Chip	1 μ F	Z 10V	CL062	24105101	Cap, Chip	100pF	J 50V
C913	24092538	Cap, Chip	1 μ F	Z 10V	CL063	24105101	Cap, Chip	100pF	J 50V
C950	24619099	Cap, Chip	33 μ F	M 10V	CL064	24105101	Cap, Chip	100pF	J 50V
C951	24092538	Cap, Chip	1 μ F	Z 10V	CL065	24105101	Cap, Chip	100pF	J 50V
C952	24619099	Cap, Chip	33 μ F	M 10V	CL066	24105101	Cap, Chip	100pF	J 50V
C953	24092538	Cap, Chip	1 μ F	Z 10V	CL067	24105101	Cap, Chip	100pF	J 50V
C954	24619106	Cap, Chip	33 μ F	M 25V	CL068	24105101	Cap, Chip	100pF	J 50V
C955	24092293	Cap, Chip	0.1 μ F	Z 25V	CL069	24105101	Cap, Chip	100pF	J 50V
C956	24619106	Cap, Chip	33 μ F	M 25V	CL070	24105101	Cap, Chip	100pF	J 50V
C957	24092441	Cap, Chip	1 μ F	Z 16V	CL071	24105101	Cap, Chip	100pF	J 50V
C958	24619106	Cap, Chip	33 μ F	M 25V	CL072	24105101	Cap, Chip	100pF	J 50V
C959	24092293	Cap, Chip	0.1 μ F	Z 25V	CL073	24105101	Cap, Chip	100pF	J 50V
C960	24619106	Cap, Chip	33 μ F	M 25V	CL074	24105101	Cap, Chip	100pF	J 50V
C961	24092441	Cap, Chip	1 μ F	Z 16V	CL075	24105101	Cap, Chip	100pF	J 50V
CF005	24619102	Cap, Chip	47 μ F	M 16V	CL076	24100104	Cap, Chip	0.1 μ F	Z 25V

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
CL077	24619102	Cap, Chip	47 μ F	M 16V	R917	24011330	Res, Chip	33 Ω	J 1/20W
CL078	24100104	Cap, Chip	0.1 μ F	Z 25V	R918	24011330	Res, Chip	33 Ω	J 1/20W
CL079	24619102	Cap, Chip	47 μ F	M 16V	R919	24011330	Res, Chip	33 Ω	J 1/20W
CL080	24100104	Cap, Chip	0.1 μ F	Z 25V	R920	24011330	Res, Chip	33 Ω	J 1/20W
CL081	24100104	Cap, Chip	0.1 μ F	Z 25V	R921	24011330	Res, Chip	33 Ω	J 1/20W
CL082	24619102	Cap, Chip	47 μ F	M 16V	R922	24011330	Res, Chip	33 Ω	J 1/20W
CL084	24100104	Cap, Chip	0.1 μ F	Z 25V	R950	24011302	Res, Chip	3k Ω	J 1/20W
CL085	24100104	Cap, Chip	0.1 μ F	Z 25V	R951	24011102	Res, Chip	1k Ω	J 1/20W
CL086	24619103	Cap, Chip	4.7 μ F	M 25V	R952	24011113	Res, Chip	11k Ω	J 1/20W
CL087	24619103	Cap, Chip	4.7 μ F	M 25V	R953	24011391	Res, Chip	390 Ω	J 1/20W
CL088	24100104	Cap, Chip	0.1 μ F	Z 25V	R954	24011102	Res, Chip	1k Ω	J 1/20W
CL089	24100104	Cap, Chip	0.1 μ F	Z 25V	R955	24011912	Res, Chip	9.1k Ω	J 1/20W
CL090	24100104	Cap, Chip	0.1 μ F	Z 25V	R956	24011681	Res, Chip	680 Ω	J 1/20W
CL091	24100104	Cap, Chip	0.1 μ F	Z 25V	R957	24011102	Res, Chip	1k Ω	J 1/20W
CL092	24100104	Cap, Chip	0.1 μ F	Z 25V	RF004	24011473	Res, Chip	47k Ω	J 1/20W
CL093	24619102	Cap, Chip	47 μ F	M 16V	RF005	24011102	Res, Chip	1k Ω	J 1/20W
CL095	24109152	Cap, Chip	1500pF	K 50V	RF006	24011102	Res, Chip	1k Ω	J 1/20W
CL096	24109152	Cap, Chip	1500pF	K 50V	RF007	24019112	Res, Chip	1 Ω	F 1/8W
CL100	24109152	Cap, Chip	1500pF	K 50V	RF008	24019112	Res, Chip	1 Ω	F 1/8W
CL101	24105101	Cap, Chip	100pF	J 50V	RF009	24019012	Res, Chip	51 Ω	J 1W
CL102	24105101	Cap, Chip	100pF	J 50V	RF010	24019012	Res, Chip	51 Ω	J 1W
CL103	24105101	Cap, Chip	100pF	J 50V	RF011	24019011	Res, Chip	39 Ω	J 1W
CL104	24105101	Cap, Chip	100pF	J 50V	RF012	24019011	Res, Chip	39 Ω	J 1W
CL105	24105101	Cap, Chip	100pF	J 50V	RF013	24011472	Res, Chip	4.7k Ω	J 1/20W
CL107	24105101	Cap, Chip	100pF	J 50V	RF014	24011472	Res, Chip	4.7k Ω	J 1/20W
CL110	24100104	Cap, Chip	0.1 μ F	Z 25V	RF015	24011221	Res, Chip	220 Ω	J 1/20W
CL111	24619103	Cap, Chip	4.7 μ F	M 25V	RF016	24011221	Res, Chip	220 Ω	J 1/20W
CL112	24100104	Cap, Chip	0.1 μ F	Z 25V	RF017	24011101	Res, Chip	100 Ω	J 1/20W
- RESISTORS -					RF018	24011101	Res, Chip	100 Ω	J 1/20W
R407	24000609	Res, Chip	27k Ω	F 1/16W	RF019	24011103	Res, Chip	10k Ω	J 1/20W
R408	24000609	Res, Chip	27k Ω	F 1/16W	RF020	24011103	Res, Chip	10k Ω	J 1/20W
R409	24011101	Res, Chip	100 Ω	J 1/20W	RF021	24011102	Res, Chip	1k Ω	J 1/20W
R410	24011332	Res, Chip	3.3k Ω	J 1/20W	RF022	24011102	Res, Chip	1k Ω	J 1/20W
R411	24011332	Res, Chip	3.3k Ω	J 1/20W	RF024	24011243	Res, Chip	24k Ω	J 1/20W
R412	24011339	Res, Chip	3.3 Ω	J 1/20W	RF025	24011103	Res, Chip	10k Ω	J 1/20W
R413	24011339	Res, Chip	3.3 Ω	J 1/20W	RF026	24000607	Res, Chip	22k Ω	F 1/16W
R507	24000609	Res, Chip	27k Ω	F 1/16W	RF027	24011104	Res, Chip	100k Ω	J 1/20W
R508	24000609	Res, Chip	27k Ω	F 1/16W	RF028	24011102	Res, Chip	1k Ω	J 1/20W
R509	24011101	Res, Chip	100 Ω	J 1/20W	RF029	24000607	Res, Chip	22k Ω	F 1/16W
R510	24011332	Res, Chip	3.3k Ω	J 1/20W	RL011	24011102	Res, Chip	1k Ω	J 1/20W
R511	24011332	Res, Chip	3.3k Ω	J 1/20W	RL012	24011123	Res, Chip	12k Ω	J 1/20W
R512	24011339	Res, Chip	3.3 Ω	J 1/20W	RL013	24011123	Res, Chip	12k Ω	J 1/20W
R513	24011339	Res, Chip	3.3 Ω	J 1/20W	RL014	24011123	Res, Chip	12k Ω	J 1/20W
R607	24000609	Res, Chip	27k Ω	F 1/16W	RL015	24011101	Res, Chip	100 Ω	J 1/20W
R608	24000609	Res, Chip	27k Ω	F 1/16W	RL016	24011102	Res, Chip	1k Ω	J 1/20W
R609	24011101	Res, Chip	100 Ω	J 1/20W	RL017	24011102	Res, Chip	1k Ω	J 1/20W
R610	24011332	Res, Chip	3.3k Ω	J 1/20W	RL018	24011102	Res, Chip	1k Ω	J 1/20W
R611	24011332	Res, Chip	3.3k Ω	J 1/20W	RL019	24011102	Res, Chip	1k Ω	J 1/20W
R612	24011339	Res, Chip	3.3 Ω	J 1/20W	RL020	24011102	Res, Chip	1k Ω	J 1/20W
R613	24011339	Res, Chip	3.3 Ω	J 1/20W	RL021	24011102	Res, Chip	1k Ω	J 1/20W
R615	24011510	Res, Chip	51 Ω	J 1/20W	RL022	24011102	Res, Chip	1k Ω	J 1/20W
R705	24011103	Res, Chip	10k Ω	J 1/20W	RL023	24011102	Res, Chip	1k Ω	J 1/20W
R706	24011103	Res, Chip	10k Ω	J 1/20W	RL024	24011102	Res, Chip	1k Ω	J 1/20W
R708	24000445	Res, Chip Jumper	0 Ω		RL025	24011102	Res, Chip	1k Ω	J 1/20W
R709	24011302	Res, Chip	3k Ω	J 1/20W	RL026	24011102	Res, Chip	1k Ω	J 1/20W
R710	24011132	Res, Chip	1.3k Ω	J 1/20W	RL027	24011102	Res, Chip	1k Ω	J 1/20W
R711	24011132	Res, Chip	1.3k Ω	J 1/20W	RL028	24011102	Res, Chip	1k Ω	J 1/20W
R712	24011392	Res, Chip	3.9k Ω	J 1/20W	RL029	24011102	Res, Chip	1k Ω	J 1/20W
R900	24011101	Res, Chip	100 Ω	J 1/20W	RL030	24011102	Res, Chip	1k Ω	J 1/20W
R901	24011101	Res, Chip	100 Ω	J 1/20W	RL031	24011102	Res, Chip	1k Ω	J 1/20W
R902	24011101	Res, Chip	100 Ω	J 1/20W	RL032	24011102	Res, Chip	1k Ω	J 1/20W
R903	24011101	Res, Chip	100 Ω	J 1/20W	RL033	24011102	Res, Chip	1k Ω	J 1/20W
R904	24011101	Res, Chip	100 Ω	J 1/20W	RL034	24011102	Res, Chip	1k Ω	J 1/20W
R905	24011101	Res, Chip	100 Ω	J 1/20W	RL035	24011102	Res, Chip	1k Ω	J 1/20W
R906	24011101	Res, Chip	100 Ω	J 1/20W	RL036	24011102	Res, Chip	1k Ω	J 1/20W
R907	24011101	Res, Chip	100 Ω	J 1/20W	RL037	24011102	Res, Chip	1k Ω	J 1/20W
R908	24011752	Res, Chip	7.5k Ω	J 1/20W	RL038	24011102	Res, Chip	1k Ω	J 1/20W
R909	24011562	Res, Chip	5.6k Ω	J 1/20W	RL039	24011102	Res, Chip	1k Ω	J 1/20W
R910	24011330	Res, Chip	33 Ω	J 1/20W	RL040	24011102	Res, Chip	1k Ω	J 1/20W
R911	24011330	Res, Chip	33 Ω	J 1/20W	RL041	24011102	Res, Chip	1k Ω	J 1/20W
R912	24011330	Res, Chip	33 Ω	J 1/20W	RL042	24011102	Res, Chip	1k Ω	J 1/20W
R913	24011330	Res, Chip	33 Ω	J 1/20W	RL043	24011102	Res, Chip	1k Ω	J 1/20W
R914	24011330	Res, Chip	33 Ω	J 1/20W	RL044	24011101	Res, Chip	100 Ω	J 1/20W
R915	24011330	Res, Chip	33 Ω	J 1/20W	RL045	24011102	Res, Chip	1k Ω	J 1/20W
R916	24011330	Res, Chip	33 Ω	J 1/20W	RL046	24011102	Res, Chip	1k Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RL047	24011102	Res, Chip	1kΩ	J 1/20W	RL128	24011103	Res, Chip	10kΩ	J 1/20W
RL048	24011102	Res, Chip	1kΩ	J 1/20W	RL129	24011103	Res, Chip	10kΩ	J 1/20W
RL049	24011101	Res, Chip	100Ω	J 1/20W	RL131	24011103	Res, Chip	10kΩ	J 1/20W
RL050	24011101	Res, Chip	100Ω	J 1/20W	RL140	24011472	Res, Chip	4.7kΩ	J 1/20W
RL051	24011102	Res, Chip	1kΩ	J 1/20W	RL141	24011104	Res, Chip	100kΩ	J 1/20W
RL052	24011102	Res, Chip	1kΩ	J 1/20W	RL142	24011102	Res, Chip	1kΩ	J 1/20W
RL053	24011101	Res, Chip	100Ω	J 1/20W	RL143	24011202	Res, Chip	2kΩ	J 1/20W
RL054	24011101	Res, Chip	100Ω	J 1/20W	RL144	24011302	Res, Chip	3kΩ	J 1/20W
RL055	24011102	Res, Chip	1kΩ	J 1/20W	RL145	24011474	Res, Chip	470kΩ	J 1/20W
RL056	24011102	Res, Chip	1kΩ	J 1/20W	- MISCELLANEOUS -				
RL057	24011102	Res, Chip	1kΩ	J 1/20W	P401	23903059	Connector	FPC, 32P	
RL058	24011102	Res, Chip	1kΩ	J 1/20W	P501	23903059	Connector	FPC, 32P	
RL059	24011102	Res, Chip	1kΩ	J 1/20W	P601	23903059	Connector	FPC, 32P	
RL060	24011102	Res, Chip	1kΩ	J 1/20W	P701	23903046	Socket	1mm, 50P	
RL061	24011102	Res, Chip	1kΩ	J 1/20W	PL003	70164729	Plug	3P, 1.25mm	
RL062	24011102	Res, Chip	1kΩ	J 1/20W	PL004	23903049	Socket	FPC/FFC	
RL063	24011102	Res, Chip	1kΩ	J 1/20W	PL006	23368674	Plug	2P	
RL064	24011102	Res, Chip	1kΩ	J 1/20W	PL009	23368675	Plug	3P	
RL065	24011102	Res, Chip	1kΩ	J 1/20W	PL010	23903053	Socket	FPC/FFC	
RL066	24011102	Res, Chip	1kΩ	J 1/20W	SL001	23344088	Push Switch		
RL067	24011102	Res, Chip	1kΩ	J 1/20W	SL002	23344088	Push Switch		
RL068	24011102	Res, Chip	1kΩ	J 1/20W	SL003	23344088	Push Switch		
RL069	24011102	Res, Chip	1kΩ	J 1/20W	SL004	23344088	Push Switch		
RL070	24011102	Res, Chip	1kΩ	J 1/20W	SL005	23344088	Push Switch		
RL071	24011102	Res, Chip	1kΩ	J 1/20W	SL006	23344088	Push Switch		
RL072	24011102	Res, Chip	1kΩ	J 1/20W	SL007	23344088	Push Switch		
RL073	24011102	Res, Chip	1kΩ	J 1/20W	SL008	23344088	Push Switch		
RL074	24011472	Res, Chip	4.7kΩ	J 1/20W	XL001	23153752	Crystal		
RL075	24011472	Res, Chip	4.7kΩ	J 1/20W	Z701	23103013	Filter	TEM2020T	
RL076	24011302	Res, Chip	3kΩ	J 1/20W	Z702	23103013	Filter	TEM2020T	
RL077	24011102	Res, Chip	1kΩ	J 1/20W	Z703	23103013	Filter	TEM2020T	
RL078	24011123	Res, Chip	12kΩ	J 1/20W	Z704	23103823	Filter	TEM2027D	
RL079	24011123	Res, Chip	12kΩ	J 1/20W	ZF001	A8662610	Photo Interrupter	TLP121	
RL080	24011123	Res, Chip	12kΩ	J 1/20W	ZF002	A8662610	Photo Interrupter	TLP121	
RL081	24011123	Res, Chip	12kΩ	J 1/20W	ZL005	23144586	Thermal Lead SW	OHD5D-70B	
RL082	24011123	Res, Chip	12kΩ	J 1/20W	■U0012 23781604 PC Board Assy				
RL083	24011103	Res, Chip	10kΩ	J 1/20W	- DIODES -				
RL084	24011472	Res, Chip	4.7kΩ	J 1/20W	DL301	23118313	Diode, Chip	RD6. 2M	
RL085	24011103	Res, Chip	10kΩ	J 1/20W	DL302	23118313	Diode, Chip	RD6. 2M	
RL087	24011103	Res, Chip	10kΩ	J 1/20W	- CAPACITORS -				
RL088	24011472	Res, Chip	4.7kΩ	J 1/20W	CL301	24619102	Cap, Chip	47μF	M 16V
RL089	24011472	Res, Chip	4.7kΩ	J 1/20W	- RESISTORS -				
RL090	24011103	Res, Chip	10kΩ	J 1/20W	RF030	24019424	Res	NTH4G41B503E01	
RL092	24011103	Res, Chip	10kΩ	J 1/20W	RL301	24011101	Res, Chip	100Ω	J 1/20W
RL093	24011103	Res, Chip	10kΩ	J 1/20W	- MISCELLANEOUS -				
RL094	24011103	Res, Chip	10kΩ	J 1/20W	ZL301	23906419	Photo Reciever	RPM676CBRS02	
RL095	24011103	Res, Chip	10kΩ	J 1/20W	■U002 23781605 PC Board Assy				
RL096	24011103	Res, Chip	10kΩ	J 1/20W	- INTEGRATED CIRCUITS -				
RL097	24011102	Res, Chip	1kΩ	J 1/20W	QX001	A6030107	IC	TC7S14F	
RL098	24011472	Res, Chip	4.7kΩ	J 1/20W	QX002	A6030620	IC	TC7S04F	
RL099	24011104	Res, Chip	100kΩ	J 1/20W	QX003	23906210	IC	CD0016AM	
RL100	24011104	Res, Chip	100kΩ	J 1/20W	QX004	B0638318	IC	TC160G54AF-1	
RL101	24011103	Res, Chip	10kΩ	J 1/20W	QX011	23906234	IC	M62320FP	
RL102	24011103	Res, Chip	10kΩ	J 1/20W	QX017	A6030640	IC	TC7S32F	
RL103	24011103	Res, Chip	10kΩ	J 1/20W	QX018	70129738	IC	PQ20VZ1U	
RL104	24011103	Res, Chip	10kΩ	J 1/20W	QX019	70129738	IC	PQ20VZ1U	
RL105	24011103	Res, Chip	10kΩ	J 1/20W	QX020	70129738	IC	PQ20VZ1U	
RL106	24011103	Res, Chip	10kΩ	J 1/20W	QX021	70129738	IC	PQ20VZ1U	
RL107	24011103	Res, Chip	10kΩ	J 1/20W	QX028	23906218	IC	CXA3106Q	
RL108	24011103	Res, Chip	10kΩ	J 1/20W	QX029	23905013	IC	TLC2932	
RL109	24011471	Res, Chip	470Ω	J 1/20W	QX031	A6030107	IC	TC7S14F	
RL110	24011471	Res, Chip	470Ω	J 1/20W	QX032	70129738	IC	PQ20VZ1U	
RL111	24011471	Res, Chip	470Ω	J 1/20W	QX033	70129738	IC	PQ20VZ1U	
RL112	24011471	Res, Chip	470Ω	J 1/20W	QX034	70129738	IC	PQ20VZ1U	
RL113	24011471	Res, Chip	470Ω	J 1/20W	QX035	70200430	IC	RN5VD27A	
RL114	24011471	Res, Chip	470Ω	J 1/20W	QX037	A6030630	IC	TC7S08F	
RL117	24011102	Res, Chip	1kΩ	J 1/20W	QX038	A6030630	IC	TC7S08F	
RL118	24011102	Res, Chip	1kΩ	J 1/20W	QX201	23906219	IC	CXA3026Q	
RL119	24011102	Res, Chip	1kΩ	J 1/20W	QX202	23906235	IC	MB814265-60	
RL120	24011102	Res, Chip	1kΩ	J 1/20W	QX203	23906235	IC	MB814265-60	
RL121	24011102	Res, Chip	1kΩ	J 1/20W	QX204	B0508347	IC	TC203E2651AF	
RL123	24011102	Res, Chip	1kΩ	J 1/20W	QX205	23906235	IC	MB814265-60	
RL125	24011103	Res, Chip	10kΩ	J 1/20W	QX206	23906235	IC	MB814265-60	
RL126	24011103	Res, Chip	10kΩ	J 1/20W					
RL127	24011103	Res, Chip	10kΩ	J 1/20W					

LOCATION NUMBER	PART NUMBER	DESCRIPTION	
QX301	23906388	IC	CXA3197R
QX401	23906219	IC	CXA3026Q
QX402	23906235	IC	MB814265-60
QX403	23906235	IC	MB814265-60
QX404	B0508347	IC	TC203E2651AF
QX405	23906235	IC	MB814265-60
QX406	23906235	IC	MB814265-60
QX501	23906388	IC	CXA3197R
QX601	23906219	IC	CXA3026Q
QX602	23906235	IC	MB814265-60
QX603	23906235	IC	MB814265-60
QX604	B0508347	IC	TC203E2651AF
QX605	23906235	IC	MB814265-60
QX606	23906235	IC	MB814265-60
QX701	23906388	IC	CXA3197R
QX801	23906389	IC	EPF60160C208
QX802	23906390	IC	EPC11C20
QX803	23906218	IC	CXA3106Q
QX804	B0489205	IC	TC74AC04F
QX805	B0488060	IC	TC74HC541AF
QX808	A6030630	IC	TC7S08F
QX809	23906234	IC	M62320FP
QX810	A6030107	IC	TC7S14F
QX811	23319214	IC	MC33078M
- TRANSISTORS -			
QX022	A6549570	Transistor, Chip	2SA1586-Y
QX023	A6335470	Transistor, Chip	2SC2712-Y
QX024	A6335470	Transistor, Chip	2SC2712-Y
QX025	A6365620	Transistor, Chip	2SC4116-Y
QX026	A6541130	Transistor, Chip	2SA1162-Y
QX027	A6541130	Transistor, Chip	2SA1162-Y
QX302	A6549570	Transistor, Chip	2SA1586-Y
QX502	A6549570	Transistor, Chip	2SA1586-Y
QX702	A6549570	Transistor, Chip	2SA1586-Y
QX807	A6365620	Transistor, Chip	2SC4116-Y
- DIODES -			
DX001	A7150800	Diode, Chip	1SS187
DX002	23118313	Diode, Chip	RD6. 2M
- COILS -			
LX003	23103793	Coil, Chip	MMZ2012S121A
LX004	23103793	Coil, Chip	MMZ2012S121A
LX005	23103793	Coil, Chip	MMZ2012S121A
LX007	23103793	Coil, Chip	MMZ2012S121A
LX008	23103793	Coil, Chip	MMZ2012S121A
LX009	23103880	Coil, Choke	TEM2011Y
LX010	23103793	Coil, Chip	MMZ2012S121A
LX011	23103793	Coil, Chip	MMZ2012S121A
LX012	23103793	Coil, Chip	MMZ2012S121A
LX013	23103880	Coil, Choke	TEM2011Y
LX014	23103793	Coil, Chip	MMZ2012S121A
LX015	23103793	Coil, Chip	MMZ2012S121A
LX016	23103793	Coil, Chip	MMZ2012S121A
LX017	23103793	Coil, Chip	MMZ2012S121A
LX018	23103793	Coil, Chip	MMZ2012S121A
LX019	23103793	Coil, Chip	MMZ2012S121A
LX020	23103793	Coil, Chip	MMZ2012S121A
LX201	23103793	Coil, Chip	MMZ2012S121A
LX202	23103793	Coil, Chip	MMZ2012S121A
LX205	23103793	Coil, Chip	MMZ2012S121A
LX206	23103793	Coil, Chip	MMZ2012S121A
LX207	23103793	Coil, Chip	MMZ2012S121A
LX401	23103793	Coil, Chip	MMZ2012S121A
LX402	23103793	Coil, Chip	MMZ2012S121A
LX405	23103793	Coil, Chip	MMZ2012S121A
LX406	23103793	Coil, Chip	MMZ2012S121A
LX407	23103793	Coil, Chip	MMZ2012S121A
LX601	23103793	Coil, Chip	MMZ2012S121A
LX602	23103793	Coil, Chip	MMZ2012S121A
LX605	23103793	Coil, Chip	MMZ2012S121A
LX606	23103793	Coil, Chip	MMZ2012S121A
LX607	23103793	Coil, Chip	MMZ2012S121A
LX801	23103793	Coil, Chip	MMZ2012S121A
LX802	23103793	Coil, Chip	MMZ2012S121A
LX803	24000824	Chip Jumper	
LX806	23103793	Coil, Chip	MMZ2012S121A

LOCATION NUMBER	PART NUMBER	DESCRIPTION		
- CAPACITORS -				
CX001	24092538	Cap, Chip	1 μ F	Z 10V
CX002	24092538	Cap, Chip	1 μ F	Z 10V
CX003	24092538	Cap, Chip	1 μ F	Z 10V
CX004	24092538	Cap, Chip	1 μ F	Z 10V
CX005	24092538	Cap, Chip	1 μ F	Z 10V
CX006	24092538	Cap, Chip	1 μ F	Z 10V
CX007	24092538	Cap, Chip	1 μ F	Z 10V
CX008	24092538	Cap, Chip	1 μ F	Z 10V
CX009	24092538	Cap, Chip	1 μ F	Z 10V
CX010	24092538	Cap, Chip	1 μ F	Z 10V
CX011	24092538	Cap, Chip	1 μ F	Z 10V
CX012	24092538	Cap, Chip	1 μ F	Z 10V
CX013	24092538	Cap, Chip	1 μ F	Z 10V
CX014	24092538	Cap, Chip	1 μ F	Z 10V
CX015	24092538	Cap, Chip	1 μ F	Z 10V
CX016	24092538	Cap, Chip	1 μ F	Z 10V
CX019	24092399	Cap, Chip	0. 1 μ F	Z 16V
CX020	24092538	Cap, Chip	1 μ F	Z 10V
CX021	24092538	Cap, Chip	1 μ F	Z 10V
CX035	24092538	Cap, Chip	1 μ F	Z 10V
CX044	24092538	Cap, Chip	1 μ F	Z 10V
CX046	24092538	Cap, Chip	1 μ F	Z 10V
CX072	24108101	Cap, Chip	100pF	J 50V
CX073	24108101	Cap, Chip	100pF	J 50V
CX074	24108101	Cap, Chip	100pF	J 50V
CX076	24108101	Cap, Chip	100pF	J 50V
CX077	24108101	Cap, Chip	100pF	J 50V
CX078	24108101	Cap, Chip	100pF	J 50V
CX079	24108101	Cap, Chip	100pF	J 50V
CX080	24108101	Cap, Chip	100pF	J 50V
CX081	24092538	Cap, Chip	1 μ F	Z 10V
CX083	24088080	Cap, Chip	33 μ F	M 10V
CX084	24108101	Cap, Chip	100pF	J 50V
CX085	24088951	Cap, Chip	6. 8 μ F	M 16V
CX086	24092538	Cap, Chip	1 μ F	Z 10V
CX087	24092538	Cap, Chip	1 μ F	Z 10V
CX088	24088951	Cap, Chip	6. 8 μ F	M 16V
CX089	24088951	Cap, Chip	6. 8 μ F	M 16V
CX090	24092538	Cap, Chip	1 μ F	Z 10V
CX091	24092538	Cap, Chip	1 μ F	Z 10V
CX092	24088951	Cap, Chip	6. 8 μ F	M 16V
CX093	24088951	Cap, Chip	6. 8 μ F	M 16V
CX094	24092538	Cap, Chip	1 μ F	Z 10V
CX095	24092538	Cap, Chip	1 μ F	Z 10V
CX096	24088951	Cap, Chip	6. 8 μ F	M 16V
CX097	24088951	Cap, Chip	6. 8 μ F	M 16V
CX098	24092538	Cap, Chip	1 μ F	Z 10V
CX099	24092538	Cap, Chip	1 μ F	Z 10V
CX100	24088079	Cap, Chip	10 μ F	M 10V
CX101	24108101	Cap, Chip	100pF	J 50V
CX102	24108101	Cap, Chip	100pF	J 50V
CX103	24108101	Cap, Chip	100pF	J 50V
CX104	24108101	Cap, Chip	100pF	J 50V
CX105	24108101	Cap, Chip	100pF	J 50V
CX106	24108101	Cap, Chip	100pF	J 50V
CX107	24108101	Cap, Chip	100pF	J 50V
CX108	24108101	Cap, Chip	100pF	J 50V
CX109	24108101	Cap, Chip	100pF	J 50V
CX110	24108101	Cap, Chip	100pF	J 50V
CX111	24108101	Cap, Chip	100pF	J 50V
CX112	24108101	Cap, Chip	100pF	J 50V
CX113	24108101	Cap, Chip	100pF	J 50V
CX114	24108101	Cap, Chip	100pF	J 50V
CX115	24108101	Cap, Chip	100pF	J 50V
CX126	24108101	Cap, Chip	100pF	J 50V
CX127	24109103	Cap, Chip	0. 01 μ F	K 25V
CX128	24109103	Cap, Chip	0. 01 μ F	K 25V
CX130	24108101	Cap, Chip	100pF	J 50V
CX131	24109122	Cap, Chip	1200pF	K 50V
CX132	24092463	Cap, Chip	0. 22 μ F	K 16V
CX133	24092538	Cap, Chip	1 μ F	Z 10V
CX134	24092538	Cap, Chip	1 μ F	Z 10V
CX135	24092538	Cap, Chip	1 μ F	Z 10V
CX136	24092538	Cap, Chip	1 μ F	Z 10V

CX137	24092538	Cap, Chip	1 μ F	Z 10V
CX138	24092538	Cap, Chip	1 μ F	Z 10V
CX139	24092538	Cap, Chip	1 μ F	Z 10V
CX140	24092538	Cap, Chip	1 μ F	Z 10V
CX141	24092538	Cap, Chip	1 μ F	Z 10V
CX142	24092538	Cap, Chip	1 μ F	Z 10V
CX143	24092538	Cap, Chip	1 μ F	Z 10V
CX144	24092538	Cap, Chip	1 μ F	Z 10V
CX145	24109103	Cap, Chip	0.01 μ F	K 25V
CX146	24109103	Cap, Chip	0.01 μ F	K 25V
CX147	24088951	Cap, Chip	6.8 μ F	M 16V
CX148	24092538	Cap, Chip	1 μ F	Z 10V
CX149	24092538	Cap, Chip	1 μ F	Z 10V
CX150	24088079	Cap, Chip	10 μ F	M 10V
CX151	24088951	Cap, Chip	6.8 μ F	M 16V
CX152	24092538	Cap, Chip	1 μ F	Z 10V
CX153	24092538	Cap, Chip	1 μ F	Z 10V
CX154	24088951	Cap, Chip	6.8 μ F	M 16V
CX155	24088951	Cap, Chip	6.8 μ F	M 16V
CX156	24092538	Cap, Chip	1 μ F	Z 10V
CX157	24092538	Cap, Chip	1 μ F	Z 10V
CX158	24088951	Cap, Chip	6.8 μ F	M 16V
CX159	24092538	Cap, Chip	1 μ F	Z 10V
CX160	24092538	Cap, Chip	1 μ F	Z 10V
CX161	24092399	Cap, Chip	0.1 μ F	Z 16V
CX162	24092178	Cap, Chip	0.1 μ F	K 25V
CX201	24088079	Cap, Chip	10 μ F	M 10V
CX202	24092538	Cap, Chip	1 μ F	Z 10V
CX203	24092538	Cap, Chip	1 μ F	Z 10V
CX204	24092538	Cap, Chip	1 μ F	Z 10V
CX205	24088079	Cap, Chip	10 μ F	M 10V
CX206	24092538	Cap, Chip	1 μ F	Z 10V
CX207	24092538	Cap, Chip	1 μ F	Z 10V
CX208	24092538	Cap, Chip	1 μ F	Z 10V
CX209	24092538	Cap, Chip	1 μ F	Z 10V
CX210	24088079	Cap, Chip	10 μ F	M 10V
CX211	24092538	Cap, Chip	1 μ F	Z 10V
CX212	24092538	Cap, Chip	1 μ F	Z 10V
CX213	24092538	Cap, Chip	1 μ F	Z 10V
CX214	24092538	Cap, Chip	1 μ F	Z 10V
CX215	24092538	Cap, Chip	1 μ F	Z 10V
CX216	24092538	Cap, Chip	1 μ F	Z 10V
CX217	24092538	Cap, Chip	1 μ F	Z 10V
CX218	24092538	Cap, Chip	1 μ F	Z 10V
CX219	24092538	Cap, Chip	1 μ F	Z 10V
CX220	24092538	Cap, Chip	1 μ F	Z 10V
CX221	24092538	Cap, Chip	1 μ F	Z 10V
CX222	24092538	Cap, Chip	1 μ F	Z 10V
CX223	24092538	Cap, Chip	1 μ F	Z 10V
CX224	24092538	Cap, Chip	1 μ F	Z 10V
CX225	24092538	Cap, Chip	1 μ F	Z 10V
CX226	24092538	Cap, Chip	1 μ F	Z 10V
CX227	24092538	Cap, Chip	1 μ F	Z 10V
CX228	24092538	Cap, Chip	1 μ F	Z 10V
CX229	24092538	Cap, Chip	1 μ F	Z 10V
CX230	24092538	Cap, Chip	1 μ F	Z 10V
CX231	24092538	Cap, Chip	1 μ F	Z 10V
CX232	24092538	Cap, Chip	1 μ F	Z 10V
CX233	24092538	Cap, Chip	1 μ F	Z 10V
CX234	24092538	Cap, Chip	1 μ F	Z 10V
CX235	24092538	Cap, Chip	1 μ F	Z 10V
CX236	24092538	Cap, Chip	1 μ F	Z 10V
CX237	24092538	Cap, Chip	1 μ F	Z 10V
CX257	24092538	Cap, Chip	1 μ F	Z 10V
CX301	24088079	Cap, Chip	10 μ F	M 10V
CX302	24092538	Cap, Chip	1 μ F	Z 10V
CX303	24092538	Cap, Chip	1 μ F	Z 10V
CX304	24092538	Cap, Chip	1 μ F	Z 10V
CX305	24092538	Cap, Chip	1 μ F	Z 10V
CX306	24092538	Cap, Chip	1 μ F	Z 10V
CX401	24088079	Cap, Chip	10 μ F	M 10V
CX402	24092538	Cap, Chip	1 μ F	Z 10V
CX403	24092538	Cap, Chip	1 μ F	Z 10V
CX404	24092538	Cap, Chip	1 μ F	Z 10V
CX405	24088079	Cap, Chip	10 μ F	M 10V

[illegible]

LOCATION NUMBER	PART NUMBER	DESCRIPTION		
CX637	24092538	Cap, Chip	1 μ F	Z 10V
CX657	24092538	Cap, Chip	1 μ F	Z 10V
CX701	24088079	Cap, Chip	10 μ F	M 10V
CX702	24092538	Cap, Chip	1 μ F	Z 10V
CX703	24092538	Cap, Chip	1 μ F	Z 10V
CX704	24092538	Cap, Chip	1 μ F	Z 10V
CX705	24092538	Cap, Chip	1 μ F	Z 10V
CX706	24092538	Cap, Chip	1 μ F	Z 10V
CX801	24108101	Cap, Chip	100pF	J 50V
CX811	24108101	Cap, Chip	100pF	J 50V
CX812	24109122	Cap, Chip	1200pF	K 50V
CX813	24092399	Cap, Chip	0.1 μ F	Z 16V
CX814	24092463	Cap, Chip	0.22 μ F	K 16V
CX815	24092538	Cap, Chip	1 μ F	Z 10V
CX816	24092538	Cap, Chip	1 μ F	Z 10V
CX817	24092538	Cap, Chip	1 μ F	Z 10V
CX818	24092538	Cap, Chip	1 μ F	Z 10V
CX819	24092538	Cap, Chip	1 μ F	Z 10V
CX820	24092538	Cap, Chip	1 μ F	Z 10V
CX821	24092538	Cap, Chip	1 μ F	Z 10V
CX822	24092538	Cap, Chip	1 μ F	Z 10V
CX823	24092538	Cap, Chip	1 μ F	Z 10V
CX824	24092538	Cap, Chip	1 μ F	Z 10V
CX831	24092538	Cap, Chip	1 μ F	Z 10V
CX851	24092538	Cap, Chip	1 μ F	Z 10V
CX852	24092538	Cap, Chip	1 μ F	Z 10V
CX853	24092538	Cap, Chip	1 μ F	Z 10V
CX854	24092538	Cap, Chip	1 μ F	Z 10V
CX855	24092538	Cap, Chip	1 μ F	Z 10V
CX856	24092538	Cap, Chip	1 μ F	Z 10V
CX857	24092538	Cap, Chip	1 μ F	Z 10V
CX858	24092538	Cap, Chip	1 μ F	Z 10V
CX859	24092538	Cap, Chip	1 μ F	Z 10V
CX860	24092538	Cap, Chip	1 μ F	Z 10V
CX861	24092538	Cap, Chip	1 μ F	Z 10V
CX862	24092538	Cap, Chip	1 μ F	Z 10V
CX863	24092538	Cap, Chip	1 μ F	Z 10V
CX864	24092538	Cap, Chip	1 μ F	Z 10V
CX865	24092538	Cap, Chip	1 μ F	Z 10V
CX866	24092538	Cap, Chip	1 μ F	Z 10V
CX867	24092538	Cap, Chip	1 μ F	Z 10V
CX868	24092538	Cap, Chip	1 μ F	Z 10V
CX869	24092538	Cap, Chip	1 μ F	Z 10V
CX871	24108101	Cap, Chip	100pF	J 50V
CX872	24108101	Cap, Chip	100pF	J 50V
CX873	24108101	Cap, Chip	100pF	J 50V
CX874	24108101	Cap, Chip	100pF	J 50V
CX875	24108101	Cap, Chip	100pF	J 50V
CX876	24108101	Cap, Chip	100pF	J 50V
CX878	24108101	Cap, Chip	100pF	J 50V
CX879	24108101	Cap, Chip	100pF	J 50V
CX880	24108101	Cap, Chip	100pF	J 50V
CX881	24108101	Cap, Chip	100pF	J 50V
CX882	24108101	Cap, Chip	100pF	J 50V
CX883	24108101	Cap, Chip	100pF	J 50V
CX884	24108101	Cap, Chip	100pF	J 50V
CX885	24092538	Cap, Chip	1 μ F	Z 10V
CX888	24092538	Cap, Chip	1 μ F	Z 10V
CX889	24092538	Cap, Chip	1 μ F	Z 10V
CX890	24092178	Cap, Chip	0.1 μ F	K 25V
CX891	24092538	Cap, Chip	1 μ F	Z 10V
CX892	24092538	Cap, Chip	1 μ F	Z 10V
- RESISTORS -				
R958	24011104	Res, Chip	100k Ω	J 1/20W
RX004	24011474	Res, Chip	470k Ω	J 1/20W
RX046	24011470	Res, Chip	47 Ω	J 1/20W
RX049	24011102	Res, Chip	1k Ω	J 1/20W
RX050	24011101	Res, Chip	100 Ω	J 1/20W
RX051	24011101	Res, Chip	100 Ω	J 1/20W
RX052	24011101	Res, Chip	100 Ω	J 1/20W
RX053	24011470	Res, Chip	47 Ω	J 1/20W
RX054	24011470	Res, Chip	47 Ω	J 1/20W
RX055	24011470	Res, Chip	47 Ω	J 1/20W
RX056	24011470	Res, Chip	47 Ω	J 1/20W
RX057	24011101	Res, Chip	100 Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RX058	24872101	Res, Chip	100 Ω	J 1/16W
RX059	24011302	Res, Chip	3k Ω	J 1/20W
RX060	24011102	Res, Chip	1k Ω	J 1/20W
RX061	24011302	Res, Chip	3k Ω	J 1/20W
RX062	24011102	Res, Chip	1k Ω	J 1/20W
RX063	24011302	Res, Chip	3k Ω	J 1/20W
RX064	24011102	Res, Chip	1k Ω	J 1/20W
RX065	24011152	Res, Chip	1.5k Ω	J 1/20W
RX066	24011102	Res, Chip	1k Ω	J 1/20W
RX067	24011101	Res, Chip	100 Ω	J 1/20W
RX068	24011101	Res, Chip	100 Ω	J 1/20W
RX069	24011101	Res, Chip	100 Ω	J 1/20W
RX070	24011101	Res, Chip	100 Ω	J 1/20W
RX071	24011101	Res, Chip	100 Ω	J 1/20W
RX072	24011101	Res, Chip	100 Ω	J 1/20W
RX073	24011101	Res, Chip	100 Ω	J 1/20W
RX074	24011101	Res, Chip	100 Ω	J 1/20W
RX075	24011101	Res, Chip	100 Ω	J 1/20W
RX076	24011101	Res, Chip	100 Ω	J 1/20W
RX077	24011101	Res, Chip	100 Ω	J 1/20W
RX078	24011101	Res, Chip	100 Ω	J 1/20W
RX079	24011101	Res, Chip	100 Ω	J 1/20W
RX080	24011470	Res, Chip	47 Ω	J 1/20W
RX081	24011470	Res, Chip	47 Ω	J 1/20W
RX092	24011470	Res, Chip	47 Ω	J 1/20W
RX094	24011151	Res, Chip	150 Ω	J 1/20W
RX096	24011561	Res, Chip	560 Ω	J 1/20W
RX097	24011100	Res, Chip	10 Ω	J 1/20W
RX098	24011100	Res, Chip	10 Ω	J 1/20W
RX102	24011470	Res, Chip	47 Ω	J 1/20W
RX103	24011470	Res, Chip	47 Ω	J 1/20W
RX104	24011911	Res, Chip	910 Ω	J 1/20W
RX105	24011472	Res, Chip	4.7k Ω	J 1/20W
RX106	24011302	Res, Chip	3k Ω	J 1/20W
RX107	24011202	Res, Chip	2k Ω	J 1/20W
RX110	24011332	Res, Chip	3.3k Ω	J 1/20W
RX111	24000424	Res, Chip	1.6k Ω	F 1/16W
RX112	24011470	Res, Chip	47 Ω	J 1/20W
RX113	24011332	Res, Chip	3.3k Ω	J 1/20W
RX114	24011102	Res, Chip	1k Ω	J 1/20W
RX115	24011102	Res, Chip	1k Ω	J 1/20W
RX116	24011470	Res, Chip	47 Ω	J 1/20W
RX117	24011103	Res, Chip	10k Ω	J 1/20W
RX118	24011180	Res, Chip	18 Ω	J 1/20W
RX119	24011470	Res, Chip	47 Ω	J 1/20W
RX120	24011152	Res, Chip	1.5k Ω	J 1/20W
RX121	24011102	Res, Chip	1k Ω	J 1/20W
RX122	24011302	Res, Chip	3k Ω	J 1/20W
RX123	24011102	Res, Chip	1k Ω	J 1/20W
RX124	24011302	Res, Chip	3k Ω	J 1/20W
RX125	24011102	Res, Chip	1k Ω	J 1/20W
RX126	24011561	Res, Chip	560 Ω	J 1/20W
RX127	24011561	Res, Chip	560 Ω	J 1/20W
RX128	24011470	Res, Chip	47 Ω	J 1/20W
RX201	24011470	Res, Chip	47 Ω	J 1/20W
RX204	24872221	Res, Chip	220 Ω	J 1/16W
RX205	24872221	Res, Chip	220 Ω	J 1/16W
RX210	24011103	Res, Chip	10k Ω	J 1/20W
RX211	24011103	Res, Chip	10k Ω	J 1/20W
RX212	24011103	Res, Chip	10k Ω	J 1/20W
RX213	24011103	Res, Chip	10k Ω	J 1/20W
RX214	24011103	Res, Chip	10k Ω	J 1/20W
RX215	24011103	Res, Chip	10k Ω	J 1/20W
RX216	24011103	Res, Chip	10k Ω	J 1/20W
RX220	24872221	Res, Chip	220 Ω	J 1/16W
RX221	24872221	Res, Chip	220 Ω	J 1/16W
RX225	24011102	Res, Chip	1k Ω	J 1/20W
RX301	24011103	Res, Chip	10k Ω	J 1/20W
RX302	24871111	Res, Chip	110 Ω	J 1/8W
RX303	24011222	Res, Chip	2.2k Ω	J 1/20W
RX304	24011103	Res, Chip	10k Ω	J 1/20W
RX305	24011103	Res, Chip	10k Ω	J 1/20W
RX306	24011103	Res, Chip	10k Ω	J 1/20W
RX307	24011103	Res, Chip	10k Ω	J 1/20W
RX313	24871111	Res, Chip	110 Ω	J 1/8W

LOCATION NUMBER	PART NUMBER	DESCRIPTION		LOCATION NUMBER	PART NUMBER	DESCRIPTION	
RX381	24019346	Res, Block	100Ωx4	J 1/16W	RX867	24011470	Res, Chip 47Ω J 1/20W
RX382	24019346	Res, Block	100Ωx4	J 1/16W	RX868	24011470	Res, Chip 47Ω J 1/20W
RX383	24019346	Res, Block	100Ωx4	J 1/16W	RX869	24011470	Res, Chip 47Ω J 1/20W
RX384	24019346	Res, Block	100Ωx4	J 1/16W	RX870	24011470	Res, Chip 47Ω J 1/20W
RX401	24011470	Res, Chip	47Ω	J 1/20W	RX871	24011470	Res, Chip 47Ω J 1/20W
RX410	24011103	Res, Chip	10kΩ	J 1/20W	RX872	24011470	Res, Chip 47Ω J 1/20W
RX411	24011103	Res, Chip	10kΩ	J 1/20W	RX873	24011470	Res, Chip 47Ω J 1/20W
RX412	24011103	Res, Chip	10kΩ	J 1/20W	RX875	24011101	Res, Chip 100Ω J 1/20W
RX413	24011103	Res, Chip	10kΩ	J 1/20W	RX887	24011331	Res, Chip 330Ω J 1/20W
RX414	24011103	Res, Chip	10kΩ	J 1/20W	RX896	24000445	Res, Chip Jumper 0Ω
RX415	24011103	Res, Chip	10kΩ	J 1/20W	RX897	24000445	Res, Chip Jumper 0Ω
RX416	24011103	Res, Chip	10kΩ	J 1/20W	RX898	24000445	Res, Chip Jumper 0Ω
RX425	24011102	Res, Chip	1kΩ	J 1/20W	RX899	24000445	Res, Chip Jumper 0Ω
RX501	24011103	Res, Chip	10kΩ	J 1/20W	RX900	24011101	Res, Chip 100Ω J 1/20W
RX502	24871111	Res, Chip	110Ω	J 1/8W	RX901	24011101	Res, Chip 100Ω J 1/20W
RX503	24011222	Res, Chip	2.2kΩ	J 1/20W	RX903	24011331	Res, Chip 330Ω J 1/20W
RX504	24011103	Res, Chip	10kΩ	J 1/20W	RX904	24011331	Res, Chip 330Ω J 1/20W
RX505	24011103	Res, Chip	10kΩ	J 1/20W	RX905	24011101	Res, Chip 100Ω J 1/20W
RX506	24011103	Res, Chip	10kΩ	J 1/20W	RX906	24011103	Res, Chip 10kΩ J 1/20W
RX507	24011103	Res, Chip	10kΩ	J 1/20W	RX907	24011103	Res, Chip 10kΩ J 1/20W
RX513	24871111	Res, Chip	110Ω	J 1/8W	RX908	24011561	Res, Chip 560Ω J 1/20W
RX581	24019346	Res, Block	100Ωx4	J 1/16W	RX951	24019346	Res, Block 100Ωx4 J 1/16W
RX582	24019346	Res, Block	100Ωx4	J 1/16W	RX952	24019346	Res, Block 100Ωx4 J 1/16W
RX583	24019346	Res, Block	100Ωx4	J 1/16W	RX953	24019346	Res, Block 100Ωx4 J 1/16W
RX584	24019346	Res, Block	100Ωx4	J 1/16W	RX954	24019346	Res, Block 100Ωx4 J 1/16W
RX601	24011470	Res, Chip	47Ω	J 1/20W	RX955	24019346	Res, Block 100Ωx4 J 1/16W
RX610	24011103	Res, Chip	10kΩ	J 1/20W	RX956	24019346	Res, Block 100Ωx4 J 1/16W
RX611	24011103	Res, Chip	10kΩ	J 1/20W	RX957	24019346	Res, Block 100Ωx4 J 1/16W
RX612	24011103	Res, Chip	10kΩ	J 1/20W	RX958	24019346	Res, Block 100Ωx4 J 1/16W
RX613	24011103	Res, Chip	10kΩ	J 1/20W	RX959	24019346	Res, Block 100Ωx4 J 1/16W
RX614	24011103	Res, Chip	10kΩ	J 1/20W	RX960	24019346	Res, Block 100Ωx4 J 1/16W
RX615	24011103	Res, Chip	10kΩ	J 1/20W	RX961	24019346	Res, Block 100Ωx4 J 1/16W
RX616	24011103	Res, Chip	10kΩ	J 1/20W	RX962	24019346	Res, Block 100Ωx4 J 1/16W
RX625	24011102	Res, Chip	1kΩ	J 1/20W	- MISCELLANEOUS -		
RX701	24011103	Res, Chip	10kΩ	J 1/20W	PX001	23368671	Plug 50P, 1mm
RX702	24871151	Res, Chip	150Ω	J 1/8W	PX005	23903048	Socket FPC/FFC
RX703	24011222	Res, Chip	2.2kΩ	J 1/20W	PX006	23368671	Plug 50P, 1mm
RX704	24011103	Res, Chip	10kΩ	J 1/20W	ZX001	23103823	Filter TEM2027D
RX705	24011103	Res, Chip	10kΩ	J 1/20W	ZX003	23153491	Crystal SG81C42M
RX706	24011103	Res, Chip	10kΩ	J 1/20W	ZX004	23103823	Filter TEM2027D
RX707	24011103	Res, Chip	10kΩ	J 1/20W	ZX006	23906419	Photo Reciever RPM676CBRS02
RX713	24871151	Res, Chip	150Ω	J 1/8W	ZX201	23103013	Filter TEM2020T
RX781	24019346	Res, Block	100Ωx4	J 1/16W	ZX202	23103823	Filter TEM2027D
RX782	24019346	Res, Block	100Ωx4	J 1/16W	ZX301	23103013	Filter TEM2020T
RX783	24019346	Res, Block	100Ωx4	J 1/16W	ZX401	23103013	Filter TEM2020T
RX784	24019346	Res, Block	100Ωx4	J 1/16W	ZX402	23103823	Filter TEM2027D
RX801	24011470	Res, Chip	47Ω	J 1/20W	ZX501	23103013	Filter TEM2020T
RX802	24011470	Res, Chip	47Ω	J 1/20W	ZX601	23103013	Filter TEM2020T
RX811	24011332	Res, Chip	3.3kΩ	J 1/20W	ZX602	23103823	Filter TEM2027D
RX812	24000424	Res, Chip	1.6kΩ	F 1/16W	ZX701	23103013	Filter TEM2020T
RX813	24000445	Res, Chip Jumper	0Ω		■ U0031 23781606 PC Board Assy Video		
RX814	24000445	Res, Chip Jumper	0Ω		- INTEGRATED CIRCUITS -		
RX815	24011330	Res, Chip	33Ω	J 1/20W	QB001	70129738	IC PQ20V21U
RX817	24011470	Res, Chip	47Ω	J 1/20W	QB002	23906212	IC LM2991SX
RX818	24011470	Res, Chip	47Ω	J 1/20W	QB003	A6030620	IC TC7S04F
RX831	24011470	Res, Chip	47Ω	J 1/20W	QB004	23906217	IC MAX4121CSA
RX832	24011470	Res, Chip	47Ω	J 1/20W	QB005	23906217	IC MAX4121CSA
RX833	24011470	Res, Chip	47Ω	J 1/20W	QB006	23906217	IC MAX4121CSA
RX835	24011470	Res, Chip	47Ω	J 1/20W	QB007	23906216	IC MAX497CSE
RX836	24011470	Res, Chip	47Ω	J 1/20W	QB008	B0484924	IC TC74HCT240AF
RX851	24011102	Res, Chip	1kΩ	J 1/20W	QB009	A6030620	IC TC7S04F
RX852	24011102	Res, Chip	1kΩ	J 1/20W	QB010	A6030630	IC TC7S08F
RX854	24011100	Res, Chip	10Ω	J 1/20W	QB011	23906215	IC M52348FP
RX855	24011100	Res, Chip	10Ω	J 1/20W	QB012	23906214	IC M52347FP
RX856	24011470	Res, Chip	47Ω	J 1/20W	QB019	A6030630	IC TC7S08F
RX857	24011470	Res, Chip	47Ω	J 1/20W	QB020	A6030630	IC TC7S08F
RX858	24011470	Res, Chip	47Ω	J 1/20W	QB024	23905532	IC M52320SP
RX859	24011470	Res, Chip	47Ω	J 1/20W	QB025	23905091	IC CKA1315M
RX860	24011470	Res, Chip	47Ω	J 1/20W	QB036	23905590	IC M52055FP
RX861	24011470	Res, Chip	47Ω	J 1/20W	QB037	A6030897	IC TC4W53F
RX862	24011470	Res, Chip	47Ω	J 1/20W	QB038	A6030897	IC TC4W53F
RX863	24011470	Res, Chip	47Ω	J 1/20W	QB039	A6030640	IC TC7S32F
RX864	24011470	Res, Chip	47Ω	J 1/20W	QL001	70200127	IC UPD4721GS
RX865	24011100	Res, Chip	10Ω	J 1/20W	QV001	23906213	IC CKA1855Q
RX866	24011470	Res, Chip	47Ω	J 1/20W			

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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QV002	B0410688	IC TC9090AN
QV003	70128490	IC MM1031M
QV005	23905459	IC TDA9141
QV006	23905460	IC TDA4665T
QV007	23905462	IC TDA4672
QV008	23905461	IC TDA4780
QV045	23905091	IC CXA1315M
QV050	70129738	IC PQ20VZ1U
QV051	70129738	IC PQ20VZ1U
QV052	70129738	IC PQ20VZ1U
QV053	70129738	IC PQ20VZ1U
QV054	70129738	IC PQ20VZ1U
QV055	70129738	IC PQ20VZ1U
QV056	A6030620	IC TC7S04F
QV057	23906234	IC M62320FP
QV058	A6030620	IC TC7S04F

- TRANSISTORS -

QA07	A6335470	Transistor, Chip 2SC2712-Y
QA08	A6004020	Transistor, Chip RN1402
QB013	A6335470	Transistor, Chip 2SC2712-Y
QB014	A6335470	Transistor, Chip 2SC2712-Y
QB015	23314062	Transistor, Chip 2SC3356-T2B
QB016	23314062	Transistor, Chip 2SC3356-T2B
QB017	23314062	Transistor, Chip 2SC3356-T2B
QB026	A6004020	Transistor, Chip RN1402
QB027	A6004020	Transistor, Chip RN1402
QB028	A6004020	Transistor, Chip RN1402
QB029	A6004020	Transistor, Chip RN1402
QB030	23314062	Transistor, Chip 2SC3356-T2B
QB031	23314062	Transistor, Chip 2SC3356-T2B
QB032	23314062	Transistor, Chip 2SC3356-T2B
QB033	A6365620	Transistor, Chip 2SC4116-Y
QB034	A6365620	Transistor, Chip 2SC4116-Y
QB035	A6365620	Transistor, Chip 2SC4116-Y
QV013	A6365620	Transistor, Chip 2SC4116-Y
QV014	A6365620	Transistor, Chip 2SC4116-Y
QV015	A6365620	Transistor, Chip 2SC4116-Y
QV016	A6365620	Transistor, Chip 2SC4116-Y
QV017	A6365620	Transistor, Chip 2SC4116-Y
QV018	A6549570	Transistor, Chip 2SA1586-Y
QV019	A6365620	Transistor, Chip 2SC4116-Y
QV020	A6549570	Transistor, Chip 2SA1586-Y
QV021	A6365620	Transistor, Chip 2SC4116-Y
QV022	A6365620	Transistor, Chip 2SC4116-Y
QV023	A6365620	Transistor, Chip 2SC4116-Y
QV024	A6365620	Transistor, Chip 2SC4116-Y
QV025	A6365620	Transistor, Chip 2SC4116-Y
QV026	A6365620	Transistor, Chip 2SC4116-Y
QV027	A6365620	Transistor, Chip 2SC4116-Y
QV028	A6365620	Transistor, Chip 2SC4116-Y
QV029	A6365620	Transistor, Chip 2SC4116-Y
QV030	A6549570	Transistor, Chip 2SA1586-Y
QV031	A6365620	Transistor, Chip 2SC4116-Y
QV041	A6365620	Transistor, Chip 2SC4116-Y
QV042	A6365620	Transistor, Chip 2SC4116-Y
QV059	A6365620	Transistor, Chip 2SC4116-Y
QV060	A6365620	Transistor, Chip 2SC4116-Y

- DIODES -

DB001	A7150800	Diode, Chip 1SS187
DB002	23118315	Diode, Chip RD2. 0M-T1BB
DB003	A7152750	Diode, Chip 1SS226
DB004	A7152750	Diode, Chip 1SS226
DB005	A7152750	Diode, Chip 1SS226
DB007	23118313	Diode, Chip RD6. 2M
DB008	23118313	Diode, Chip RD6. 2M
DB009	23118313	Diode, Chip RD6. 2M
DB010	23118313	Diode, Chip RD6. 2M
DB011	A7152750	Diode, Chip 1SS226
DB012	A7152750	Diode, Chip 1SS226
DB013	A7152750	Diode, Chip 1SS226
DB014	23118313	Diode, Chip RD6. 2M
DB015	23118313	Diode, Chip RD6. 2M
DB016	A7150800	Diode, Chip 1SS187
DB017	A7150800	Diode, Chip 1SS187
DB018	23118287	Diode, Chip RD12M

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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DB019	23118313	Diode, Chip RD6. 2M
DB020	23118313	Diode, Chip RD6. 2M
DB021	23118313	Diode, Chip RD6. 2M
DB022	23118313	Diode, Chip RD6. 2M
DL001	23118313	Diode, Chip RD6. 2M
DL002	23118293	Diode, Chip RD10MB2
DL003	23118293	Diode, Chip RD10MB2
DL004	23118293	Diode, Chip RD10MB2
DL005	23118293	Diode, Chip RD10MB2
DL006	23118293	Diode, Chip RD10MB2
DL007	23118293	Diode, Chip RD10MB2
DL008	23118293	Diode, Chip RD10MB2
DL009	23118293	Diode, Chip RD10MB2
DV001	23118287	Diode, Chip RD12M
DV002	23118287	Diode, Chip RD12M
DV003	23118287	Diode, Chip RD12M
DV004	23118293	Diode, Chip RD10MB2
DV005	23118307	Diode, Chip RD5. 1MB2
DV006	23118287	Diode, Chip RD12M
DV007	23118313	Diode, Chip RD6. 2M
DV008	23118313	Diode, Chip RD6. 2M
DV009	23118313	Diode, Chip RD6. 2M
DV010	23118313	Diode, Chip RD6. 2M
DV011	23118313	Diode, Chip RD6. 2M
DV012	23118313	Diode, Chip RD6. 2M
DV013	23118313	Diode, Chip RD6. 2M
DV014	23118313	Diode, Chip RD6. 2M
DV015	23118313	Diode, Chip RD6. 2M
DV016	23118287	Diode, Chip RD12M
DV017	23118281	Diode, Chip RD15MB2
DV018	23118313	Diode, Chip RD6. 2M

- COILS -

LB001	23103880	Coil, Choke TEM2011Y
LB002	23103880	Coil, Choke TEM2011Y
LB003	23245847	Coil, Chip TRF4330CC
LV001	23245839	Coil, Chip TRF4560CB
LV002	23245832	Coil, Chip TRF4150CB
LV003	23245835	Coil, Chip TRF4270CB
LV004	23245835	Coil, Chip TRF4270CB
LV005	23245847	Coil, Chip TRF4330CC
LV006	23245847	Coil, Chip TRF4330CC
LV007	23245828	Coil, Chip TRF46R8CB
LV008	23245837	Coil, Chip TRF41R0CB
LV009	23245847	Coil, Chip TRF4330CC
LV010	23245830	Coil, Chip TRF4100CB

- CAPACITORS -

CA01	24619113	Cap, Chip 1μF M 50V
CA02	24619113	Cap, Chip 1μF M 50V
CA03	24619113	Cap, Chip 1μF M 50V
CA04	24619113	Cap, Chip 1μF M 50V
CA23	24092399	Cap, Chip 0. 1μF Z 16V
CA26	24619113	Cap, Chip 1μF M 50V
CB001	24619102	Cap, Chip 47μF M 16V
CB002	24088953	Cap, Chip 33μF M 16V
CB003	24619106	Cap, Chip 33μF M 25V
CB004	24088953	Cap, Chip 33μF M 16V
CB005	24092399	Cap, Chip 0. 1μF Z 16V
CB006	24619088	Cap, Electrolytic 10μF M 16V
CB007	24619088	Cap, Electrolytic 10μF M 16V
CB008	24619088	Cap, Electrolytic 10μF M 16V
CB009	24109102	Cap, Chip 1000pF K 50V
CB010	24092399	Cap, Chip 0. 1μF Z 16V
CB011	24109102	Cap, Chip 1000pF K 50V
CB012	24092399	Cap, Chip 0. 1μF Z 16V
CB013	24109102	Cap, Chip 1000pF K 50V
CB014	24092399	Cap, Chip 0. 1μF Z 16V
CB015	24109102	Cap, Chip 1000pF K 50V
CB016	24092399	Cap, Chip 0. 1μF Z 16V
CB017	24109102	Cap, Chip 1000pF K 50V
CB018	24092399	Cap, Chip 0. 1μF Z 16V
CB019	24109102	Cap, Chip 1000pF K 50V
CB020	24092399	Cap, Chip 0. 1μF Z 16V
CB024	24092399	Cap, Chip 0. 1μF Z 16V
CB025	24092399	Cap, Chip 0. 1μF Z 16V
CB026	24092399	Cap, Chip 0. 1μF Z 16V

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CB027	24092399	Cap, Chip	0.1μF	Z 16V
CB028	24619102	Cap, Chip	47μF	M 16V
CB029	24619102	Cap, Chip	47μF	M 16V
CB030	24619100	Cap, Chip	10μF	M 16V
CB031	24092399	Cap, Chip	0.1μF	Z 16V
CB032	24092399	Cap, Chip	0.1μF	Z 16V
CB037	24092399	Cap, Chip	0.1μF	Z 16V
CB038	24109103	Cap, Chip	0.01μF	K 25V
CB039	24619102	Cap, Chip	47μF	M 16V
CB040	24109103	Cap, Chip	0.01μF	K 25V
CB041	24619102	Cap, Chip	47μF	M 16V
CB042	24109103	Cap, Chip	0.01μF	K 25V
CB043	24619102	Cap, Chip	47μF	M 16V
CB044	24619100	Cap, Chip	10μF	M 16V
CB045	24109103	Cap, Chip	0.01μF	K 25V
CB046	24619100	Cap, Chip	10μF	M 16V
CB047	24109103	Cap, Chip	0.01μF	K 25V
CB048	24619100	Cap, Chip	10μF	M 16V
CB049	24109103	Cap, Chip	0.01μF	K 25V
CB050	24109103	Cap, Chip	0.01μF	K 25V
CB051	24619102	Cap, Chip	47μF	M 16V
CB052	24109103	Cap, Chip	0.01μF	K 25V
CB053	24619102	Cap, Chip	47μF	M 16V
CB054	24109103	Cap, Chip	0.01μF	K 25V
CB055	24619102	Cap, Chip	47μF	M 16V
CB056	24109103	Cap, Chip	0.01μF	K 25V
CB057	24109103	Cap, Chip	0.01μF	K 25V
CB058	24109103	Cap, Chip	0.01μF	K 25V
CB059	24619102	Cap, Chip	47μF	M 16V
CB060	24109103	Cap, Chip	0.01μF	K 25V
CB061	24109103	Cap, Chip	0.01μF	K 25V
CB062	24109103	Cap, Chip	0.01μF	K 25V
CB063	24109103	Cap, Chip	0.01μF	K 25V
CB065	24109103	Cap, Chip	0.01μF	K 25V
CB066	24619102	Cap, Chip	47μF	M 16V
CB067	24109103	Cap, Chip	0.01μF	K 25V
CB068	24619102	Cap, Chip	47μF	M 16V
CB069	24109103	Cap, Chip	0.01μF	K 25V
CB070	24619102	Cap, Chip	47μF	M 16V
CB071	24109103	Cap, Chip	0.01μF	K 25V
CB072	24109103	Cap, Chip	0.01μF	K 25V
CB073	24619103	Cap, Chip	4.7μF	M 25V
CB074	24619103	Cap, Chip	4.7μF	M 25V
CB075	24619103	Cap, Chip	4.7μF	M 25V
CB076	24619103	Cap, Chip	4.7μF	M 25V
CB077	24619113	Cap, Chip	1μF	M 50V
CB078	24619100	Cap, Chip	10μF	M 16V
CB079	24108221	Cap, Chip	220pF	J 50V
CB080	24105101	Cap, Chip	100pF	J 50V
CB081	24619102	Cap, Chip	47μF	M 16V
CB082	24109103	Cap, Chip	0.01μF	K 25V
CB083	24092399	Cap, Chip	0.1μF	Z 16V
CB084	24092399	Cap, Chip	0.1μF	Z 16V
CB085	24619103	Cap, Chip	4.7μF	M 25V
CB086	24619100	Cap, Chip	10μF	M 16V
CB087	24619100	Cap, Chip	10μF	M 16V
CB088	24109103	Cap, Chip	0.01μF	K 25V
CB089	24109103	Cap, Chip	0.01μF	K 25V
CB090	24619100	Cap, Chip	10μF	M 16V
CB091	24109103	Cap, Chip	0.01μF	K 25V
CB092	24109103	Cap, Chip	0.01μF	K 25V
CB093	24619100	Cap, Chip	10μF	M 16V
CB094	24109103	Cap, Chip	0.01μF	K 25V
CB095	24109103	Cap, Chip	0.01μF	K 25V
CB096	24109103	Cap, Chip	0.01μF	K 25V
CB097	24109103	Cap, Chip	0.01μF	K 25V
CB098	24619100	Cap, Chip	10μF	M 16V
CB099	24109103	Cap, Chip	0.01μF	K 25V
CB100	24619100	Cap, Chip	10μF	M 16V
CB101	24109103	Cap, Chip	0.01μF	K 25V
CB102	24619100	Cap, Chip	10μF	M 16V
CB103	24109103	Cap, Chip	0.01μF	K 25V
CB104	24619113	Cap, Chip	1μF	M 50V
CB105	24619113	Cap, Chip	1μF	M 50V
CB106	24619113	Cap, Chip	1μF	M 50V

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CB107	24109103	Cap, Chip	0.01μF	K 25V
CB108	24619102	Cap, Chip	47μF	M 16V
CB109	24619100	Cap, Chip	10μF	M 16V
CB110	24109103	Cap, Chip	0.01μF	K 25V
CB111	24619102	Cap, Chip	47μF	M 16V
CB113	24619106	Cap, Chip	33μF	M 25V
CB114	24105270	Cap, Chip	27pF	J 50V
CB115	24105270	Cap, Chip	27pF	J 50V
CB116	24105270	Cap, Chip	27pF	J 50V
CB117	24092399	Cap, Chip	0.1μF	Z 16V
CB118	24619102	Cap, Chip	47μF	M 16V
CB119	24619102	Cap, Chip	47μF	M 16V
CB120	24619102	Cap, Chip	47μF	M 16V
CB121	24619102	Cap, Chip	47μF	M 16V
CB122	24619102	Cap, Chip	47μF	M 16V
CB123	24619102	Cap, Chip	47μF	M 16V
CB124	24619102	Cap, Chip	47μF	M 16V
CB125	24092399	Cap, Chip	0.1μF	Z 16V
CB126	24092399	Cap, Chip	0.1μF	Z 16V
CB127	24295106	Cap, Chip	10μF	M 25V
CL001	24092399	Cap, Chip	0.1μF	Z 16V
CL002	24619113	Cap, Chip	1μF	M 50V
CL003	24619113	Cap, Chip	1μF	M 50V
CL004	24619113	Cap, Chip	1μF	M 50V
CL005	24619113	Cap, Chip	1μF	M 50V
CL006	24619113	Cap, Chip	1μF	M 50V
CV001	24619102	Cap, Chip	47μF	M 16V
CV002	24619102	Cap, Chip	47μF	M 16V
CV003	24109103	Cap, Chip	0.01μF	K 25V
CV004	24109103	Cap, Chip	0.01μF	K 25V
CV006	24619100	Cap, Chip	10μF	M 16V
CV007	24109103	Cap, Chip	0.01μF	K 25V
CV008	24105120	Cap, Chip	12pF	J 50V
CV009	24105120	Cap, Chip	12pF	J 50V
CV010	24619141	Cap, Chip	2.2μF	M 50V
CV011	24619100	Cap, Chip	10μF	M 16V
CV012	24105120	Cap, Chip	12pF	J 50V
CV013	24105120	Cap, Chip	12pF	J 50V
CV014	24109103	Cap, Chip	0.01μF	K 25V
CV015	24109103	Cap, Chip	0.01μF	K 25V
CV016	24092538	Cap, Chip	1μF	Z 10V
CV017	24105220	Cap, Chip	22μF	J 50V
CV018	24105180	Cap, Chip	18pF	J 50V
CV019	24105100	Cap, Chip	10pF	J 50V
CV020	24109103	Cap, Chip	0.01μF	K 25V
CV021	24092538	Cap, Chip	1μF	Z 10V
CV022	24619100	Cap, Chip	10μF	M 16V
CV023	24619113	Cap, Chip	1μF	M 50V
CV024	24109103	Cap, Chip	0.01μF	K 25V
CV025	24092399	Cap, Chip	0.1μF	Z 16V
CV026	24619100	Cap, Chip	10μF	M 16V
CV027	24619102	Cap, Chip	47μF	M 16V
CV028	24092538	Cap, Chip	1μF	Z 10V
CV029	24619100	Cap, Chip	10μF	M 16V
CV030	24105220	Cap, Chip	22μF	J 50V
CV031	24092538	Cap, Chip	1μF	Z 10V
CV032	24105390	Cap, Chip	39pF	J 50V
CV033	24109103	Cap, Chip	0.01μF	K 25V
CV034	24105181	Cap, Chip	180pF	J 50V
CV035	24109103	Cap, Chip	0.01μF	K 25V
CV036	24109103	Cap, Chip	0.01μF	K 25V
CV037	24109103	Cap, Chip	0.01μF	K 25V
CV038	24109103	Cap, Chip	0.01μF	K 25V
CV039	24619100	Cap, Chip	10μF	M 16V
CV040	24092538	Cap, Chip	1μF	Z 10V
CV041	24109103	Cap, Chip	0.01μF	K 25V
CV042	24619100	Cap, Chip	10μF	M 16V
CV043	24092399	Cap, Chip	0.1μF	Z 16V
CV044	24092399	Cap, Chip	0.1μF	Z 16V
CV045	24092399	Cap, Chip	0.1μF	Z 16V
CV046	24092399	Cap, Chip	0.1μF	Z 16V
CV047	24092399	Cap, Chip	0.1μF	Z 16V
CV048	24109103	Cap, Chip	0.01μF	K 25V
CV049	24109103	Cap, Chip	0.01μF	K 25V
CV050	24109103	Cap, Chip	0.01μF	K 25V

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CV051	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV052	24619112	Cap, Chip	0. 47 μ F	M 50V
CV053	24815332	Cap, Chip	3300pF	K 50V
CV054	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV055	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV056	24092178	Cap, Chip	0. 1 μ F	K 25V
CV057	24092178	Cap, Chip	0. 1 μ F	K 25V
CV058	24815332	Cap, Chip	3300pF	K 50V
CV059	24105180	Cap, Chip	18pF	J 50V
CV060	24105130	Cap, Chip	13pF	J 50V
CV061	24092178	Cap, Chip	0. 1 μ F	K 25V
CV062	24105100	Cap, Chip	10pF	J 50V
CV063	24105181	Cap, Chip	180pF	J 50V
CV064	24109103	Cap, Chip	0. 01 μ F	K 25V
CV065	24619100	Cap, Chip	10 μ F	M 16V
CV066	24109103	Cap, Chip	0. 01 μ F	K 25V
CV067	24092538	Cap, Chip	1 μ F	Z 10V
CV068	24619100	Cap, Chip	10 μ F	M 16V
CV069	24109103	Cap, Chip	0. 01 μ F	K 25V
CV070	24109103	Cap, Chip	0. 01 μ F	K 25V
CV071	24619100	Cap, Chip	10 μ F	M 16V
CV072	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV073	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV074	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV075	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV076	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV077	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV078	24109103	Cap, Chip	0. 01 μ F	K 25V
CV079	24109103	Cap, Chip	0. 01 μ F	K 25V
CV081	24100473	Cap, Chip	4700pF	Z 25V
CV082	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV083	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV084	24109103	Cap, Chip	0. 01 μ F	K 25V
CV085	24109103	Cap, Chip	0. 01 μ F	K 25V
CV086	24109103	Cap, Chip	0. 01 μ F	K 25V
CV087	24109103	Cap, Chip	0. 01 μ F	K 25V
CV088	24109103	Cap, Chip	0. 01 μ F	K 25V
CV089	24109103	Cap, Chip	0. 01 μ F	K 25V
CV090	24619100	Cap, Chip	10 μ F	M 16V
CV091	24619113	Cap, Chip	1 μ F	M 50V
CV092	24092294	Cap, Chip	0. 33 μ F	Z 16V
CV093	24619113	Cap, Chip	1 μ F	M 50V
CV094	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV095	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV096	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV097	24619100	Cap, Chip	10 μ F	M 16V
CV098	24109103	Cap, Chip	0. 01 μ F	K 25V
CV111	24619102	Cap, Chip	47 μ F	M 16V
CV112	24619100	Cap, Chip	10 μ F	M 16V
CV113	24619102	Cap, Chip	47 μ F	M 16V
CV114	24109103	Cap, Chip	0. 01 μ F	K 25V
CV115	24109103	Cap, Chip	0. 01 μ F	K 25V
CV125	24109103	Cap, Chip	0. 01 μ F	K 25V
CV126	24619100	Cap, Chip	10 μ F	M 16V
CV127	24619102	Cap, Chip	47 μ F	M 16V
CV128	24109103	Cap, Chip	0. 01 μ F	K 25V
CV129	24088953	Cap, Chip	33 μ F	M 16V
CV130	24109103	Cap, Chip	0. 01 μ F	K 25V
CV131	24619102	Cap, Chip	47 μ F	M 16V
CV132	24109103	Cap, Chip	0. 01 μ F	K 25V
CV133	24088953	Cap, Chip	33 μ F	M 16V
CV134	24109103	Cap, Chip	0. 01 μ F	K 25V
CV135	24619106	Cap, Chip	33 μ F	M 25V
CV136	24109103	Cap, Chip	0. 01 μ F	K 25V
CV137	24088978	Cap, Chip	22 μ F	M 20V
CV138	24109103	Cap, Chip	0. 01 μ F	K 25V
CV139	24619102	Cap, Chip	47 μ F	M 16V
CV140	24109103	Cap, Chip	0. 01 μ F	K 25V
CV141	24088953	Cap, Chip	33 μ F	M 16V
CV142	24109103	Cap, Chip	0. 01 μ F	K 25V
CV143	24619102	Cap, Chip	47 μ F	M 16V
CV144	24109103	Cap, Chip	0. 01 μ F	K 25V
CV145	24088953	Cap, Chip	33 μ F	M 16V
CV146	24109103	Cap, Chip	0. 01 μ F	K 25V
CV147	24619106	Cap, Chip	33 μ F	M 25V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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CV148	24109103	Cap, Chip	0. 01 μ F	K 25V
CV149	24088978	Cap, Chip	22 μ F	M 20V
CV150	24109103	Cap, Chip	0. 01 μ F	K 25V
CV151	24619100	Cap, Chip	10 μ F	M 16V
CV152	24109103	Cap, Chip	0. 01 μ F	K 25V
CV153	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV154	24092399	Cap, Chip	0. 1 μ F	Z 16V
CV155	24105101	Cap, Chip	100pF	J 50V
CV156	24100103	Cap, Chip	0. 01 μ F	Z 50V
CV157	24092538	Cap, Chip	1 μ F	Z 10V
CV158	24092399	Cap, Chip	0. 1 μ F	Z 16V
- RESISTORS -				
RA01	24011474	Res, Chip	470k Ω	J 1/20W
RA02	24011562	Res, Chip	5. 6k Ω	J 1/20W
RA03	24011474	Res, Chip	470k Ω	J 1/20W
RA04	24011562	Res, Chip	5. 6k Ω	J 1/20W
RA05	24011474	Res, Chip	470k Ω	J 1/20W
RA06	24011562	Res, Chip	5. 6k Ω	J 1/20W
RA07	24011474	Res, Chip	470k Ω	J 1/20W
RA08	24011562	Res, Chip	5. 6k Ω	J 1/20W
RA35	24011332	Res, Chip	3. 3k Ω	J 1/20W
RA36	24011334	Res, Chip	330k Ω	J 1/20W
RA37	24011100	Res, Chip	10 Ω	J 1/20W
RA38	24011100	Res, Chip	10 Ω	J 1/20W
RA39	24011100	Res, Chip	10 Ω	J 1/20W
RA40	24011562	Res, Chip	5. 6k Ω	J 1/20W
RB001	24000590	Res, Chip	3k Ω	F 1/16W
RB002	24000573	Res, Chip	1k Ω	F 1/16W
RB003	24000558	Res, Chip	750 Ω	F 1/16W
RB004	24000458	Res, Chip	240 Ω	F 1/16W
RB005	24872471	Res, Chip	470 Ω	J 1/16W
RB007	24872820	Res, Chip	82 Ω	J 1/16W
RB008	24872820	Res, Chip	82 Ω	J 1/16W
RB009	24872820	Res, Chip	82 Ω	J 1/16W
RB011	24011103	Res, Chip	10k Ω	J 1/20W
RB012	24011103	Res, Chip	10k Ω	J 1/20W
RB013	24011103	Res, Chip	10k Ω	J 1/20W
RB014	24011103	Res, Chip	10k Ω	J 1/20W
RB015	24011103	Res, Chip	10k Ω	J 1/20W
RB016	24011104	Res, Chip	100k Ω	J 1/20W
RB017	24011104	Res, Chip	100k Ω	J 1/20W
RB018	24011750	Res, Chip	75 Ω	J 1/20W
RB019	24011220	Res, Chip	22 Ω	J 1/20W
RB020	24011220	Res, Chip	22 Ω	J 1/20W
RB021	24011750	Res, Chip	75 Ω	J 1/20W
RB022	24011220	Res, Chip	22 Ω	J 1/20W
RB023	24011220	Res, Chip	22 Ω	J 1/20W
RB024	24011220	Res, Chip	22 Ω	J 1/20W
RB025	24011750	Res, Chip	75 Ω	J 1/20W
RB026	24011220	Res, Chip	22 Ω	J 1/20W
RB027	24011220	Res, Chip	22 Ω	J 1/20W
RB028	24011220	Res, Chip	22 Ω	J 1/20W
RB029	24011220	Res, Chip	22 Ω	J 1/20W
RB031	24872750	Res, Chip	75 Ω	J 1/16W
RB032	24872750	Res, Chip	75 Ω	J 1/16W
RB033	24872750	Res, Chip	75 Ω	J 1/16W
RB034	24011151	Res, Chip	150 Ω	J 1/20W
RB035	24011152	Res, Chip	1. 5k Ω	J 1/20W
RB036	24011102	Res, Chip	1k Ω	J 1/20W
RB038	24011152	Res, Chip	1. 5k Ω	J 1/20W
RB039	24011102	Res, Chip	1k Ω	J 1/20W
RB041	24011152	Res, Chip	1. 5k Ω	J 1/20W
RB042	24011102	Res, Chip	1k Ω	J 1/20W
RB044	24011223	Res, Chip	22k Ω	J 1/20W
RB046	24011101	Res, Chip	100 Ω	J 1/20W
RB047	24011220	Res, Chip	22 Ω	J 1/20W
RB048	24872221	Res, Chip	220 Ω	J 1/16W
RB049	24011220	Res, Chip	22 Ω	J 1/20W
RB050	24011220	Res, Chip	22 Ω	J 1/20W
RB051	24872221	Res, Chip	220 Ω	J 1/16W
RB052	24011220	Res, Chip	22 Ω	J 1/20W
RB053	24011220	Res, Chip	22 Ω	J 1/20W
RB054	24872221	Res, Chip	220 Ω	J 1/16W
RB055	24011220	Res, Chip	22 Ω	J 1/20W
RB056	24011330	Res, Chip	33 Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RB059	24011221	Res, Chip	220Ω	J 1/20W	RB151	24011152	Res, Chip	1.5kΩ	J 1/20W
RB060	24011103	Res, Chip	10kΩ	J 1/20W	RB152	24011152	Res, Chip	1.5kΩ	J 1/20W
RB061	24011221	Res, Chip	220Ω	J 1/20W	RB153	24011152	Res, Chip	1.5kΩ	J 1/20W
RB062	24011103	Res, Chip	10kΩ	J 1/20W	RB154	24011101	Res, Chip	100Ω	J 1/20W
RB063	24011183	Res, Chip	18kΩ	J 1/20W	RB155	24011101	Res, Chip	100Ω	J 1/20W
RB064	24011222	Res, Chip	2.2kΩ	J 1/20W	RB156	24011103	Res, Chip	10kΩ	J 1/20W
RB065	24011183	Res, Chip	18kΩ	J 1/20W	RB157	24011103	Res, Chip	10kΩ	J 1/20W
RB066	24011222	Res, Chip	2.2kΩ	J 1/20W	RB158	24011103	Res, Chip	10kΩ	J 1/20W
RB067	24011563	Res, Chip	56kΩ	J 1/20W	RL001	24011301	Res, Chip	300Ω	J 1/20W
RB068	24000419	Res, Chip	4.3kΩ	F 1/16W	RL002	24011301	Res, Chip	300Ω	J 1/20W
RB069	24000408	Res, Chip	43kΩ	F 1/16W	RV001	24872750	Res, Chip	75Ω	J 1/16W
RB070	24011101	Res, Chip	100Ω	J 1/20W	RV002	24011101	Res, Chip	100Ω	J 1/20W
RB071	24011101	Res, Chip	100Ω	J 1/20W	RV003	24011101	Res, Chip	100Ω	J 1/20W
RB072	24011101	Res, Chip	100Ω	J 1/20W	RV004	24872750	Res, Chip	75Ω	J 1/16W
RB074	24011101	Res, Chip	100Ω	J 1/20W	RV005	24872750	Res, Chip	75Ω	J 1/16W
RB075	24011101	Res, Chip	100Ω	J 1/20W	RV013	24011101	Res, Chip	100Ω	J 1/20W
RB077	24011562	Res, Chip	5.6kΩ	J 1/20W	RV014	24011101	Res, Chip	100Ω	J 1/20W
RB079	24011562	Res, Chip	5.6kΩ	J 1/20W	RV015	24011471	Res, Chip	470Ω	J 1/20W
RB081	24011562	Res, Chip	5.6kΩ	J 1/20W	RV016	24011152	Res, Chip	1.5kΩ	J 1/20W
RB082	24011103	Res, Chip	10kΩ	J 1/20W	RV017	24011101	Res, Chip	100Ω	J 1/20W
RB083	24011822	Res, Chip	8.2kΩ	J 1/20W	RV018	24011821	Res, Chip	820Ω	J 1/20W
RB084	24011822	Res, Chip	8.2kΩ	J 1/20W	RV019	24011471	Res, Chip	470Ω	J 1/20W
RB085	24011822	Res, Chip	8.2kΩ	J 1/20W	RV020	24011392	Res, Chip	3.9kΩ	J 1/20W
RB086	24011822	Res, Chip	8.2kΩ	J 1/20W	RV021	24011564	Res, Chip	560kΩ	J 1/20W
RB087	24011471	Res, Chip	470Ω	J 1/20W	RV022	24011101	Res, Chip	100Ω	J 1/20W
RB088	24011100	Res, Chip	10Ω	J 1/20W	RV023	24011821	Res, Chip	820Ω	J 1/20W
RB089	24872821	Res, Chip	820Ω	J 1/16W	RV024	24011471	Res, Chip	470Ω	J 1/20W
RB090	24011100	Res, Chip	10Ω	J 1/20W	RV026	24011101	Res, Chip	100Ω	J 1/20W
RB091	24872821	Res, Chip	820Ω	J 1/16W	RV027	24011101	Res, Chip	100Ω	J 1/20W
RB092	24011100	Res, Chip	10Ω	J 1/20W	RV028	24011102	Res, Chip	1kΩ	J 1/20W
RB093	24872821	Res, Chip	820Ω	J 1/16W	RV029	24011821	Res, Chip	820Ω	J 1/20W
RB094	24011562	Res, Chip	5.6kΩ	J 1/20W	RV030	24011332	Res, Chip	3.3kΩ	J 1/20W
RB095	24011822	Res, Chip	8.2kΩ	J 1/20W	RV031	24011332	Res, Chip	3.3kΩ	J 1/20W
RB096	24011103	Res, Chip	10kΩ	J 1/20W	RV032	24011822	Res, Chip	8.2kΩ	J 1/20W
RB099	24011103	Res, Chip	10kΩ	J 1/20W	RV033	24011332	Res, Chip	3.3kΩ	J 1/20W
RB102	24011103	Res, Chip	10kΩ	J 1/20W	RV034	24011103	Res, Chip	10kΩ	J 1/20W
RB105	24011103	Res, Chip	10kΩ	J 1/20W	RV035	24011102	Res, Chip	1kΩ	J 1/20W
RB108	24011101	Res, Chip	100Ω	J 1/20W	RV036	24011102	Res, Chip	1kΩ	J 1/20W
RB109	24011101	Res, Chip	100Ω	J 1/20W	RV037	24011152	Res, Chip	1.5kΩ	J 1/20W
RB115	24011101	Res, Chip	100Ω	J 1/20W	RV038	24011102	Res, Chip	1kΩ	J 1/20W
RB116	24011101	Res, Chip	100Ω	J 1/20W	RV039	24011102	Res, Chip	1kΩ	J 1/20W
RB117	24011101	Res, Chip	100Ω	J 1/20W	RV040	24011152	Res, Chip	1.5kΩ	J 1/20W
RB118	24011101	Res, Chip	100Ω	J 1/20W	RV041	24011101	Res, Chip	100Ω	J 1/20W
RB119	24011221	Res, Chip	220Ω	J 1/20W	RV042	24011101	Res, Chip	100Ω	J 1/20W
RB120	24011221	Res, Chip	220Ω	J 1/20W	RV043	24011182	Res, Chip	1.8kΩ	J 1/20W
RB121	24011223	Res, Chip	22kΩ	J 1/20W	RV044	24011103	Res, Chip	10kΩ	J 1/20W
RB122	24011222	Res, Chip	2.2kΩ	J 1/20W	RV045	24011182	Res, Chip	1.8kΩ	J 1/20W
RB123	24011222	Res, Chip	2.2kΩ	J 1/20W	RV046	24011821	Res, Chip	820Ω	J 1/20W
RB124	24011222	Res, Chip	2.2kΩ	J 1/20W	RV047	24011271	Res, Chip	270Ω	J 1/20W
RB125	24011103	Res, Chip	10kΩ	J 1/20W	RV048	24011182	Res, Chip	1.8kΩ	J 1/20W
RB126	24011103	Res, Chip	10kΩ	J 1/20W	RV049	24011132	Res, Chip	1.3kΩ	J 1/20W
RB127	24011103	Res, Chip	10kΩ	J 1/20W	RV050	24011132	Res, Chip	1.3kΩ	J 1/20W
RB128	24872471	Res, Chip	470Ω	J 1/16W	RV051	24011102	Res, Chip	1kΩ	J 1/20W
RB129	24011560	Res, Chip	56Ω	J 1/20W	RV052	24011153	Res, Chip	15kΩ	J 1/20W
RB130	24872471	Res, Chip	470Ω	J 1/16W	RV053	24011101	Res, Chip	100Ω	J 1/20W
RB131	24011560	Res, Chip	56Ω	J 1/20W	RV054	24011101	Res, Chip	100Ω	J 1/20W
RB132	24872471	Res, Chip	470Ω	J 1/16W	RV055	24011823	Res, Chip	82kΩ	J 1/20W
RB133	24011560	Res, Chip	56Ω	J 1/20W	RV056	24011271	Res, Chip	270Ω	J 1/20W
RB134	24011222	Res, Chip	2.2kΩ	J 1/20W	RV057	24011101	Res, Chip	100Ω	J 1/20W
RB135	24011222	Res, Chip	2.2kΩ	J 1/20W	RV058	24011100	Res, Chip	10Ω	J 1/20W
RB136	24011222	Res, Chip	2.2kΩ	J 1/20W	RV059	24011332	Res, Chip	3.3kΩ	J 1/20W
RB137	24872821	Res, Chip	820Ω	J 1/16W	RV060	24011222	Res, Chip	2.2kΩ	J 1/20W
RB138	24872821	Res, Chip	820Ω	J 1/16W	RV061	24011101	Res, Chip	100Ω	J 1/20W
RB139	24872821	Res, Chip	820Ω	J 1/16W	RV062	24011101	Res, Chip	100Ω	J 1/20W
RB140	24011101	Res, Chip	100Ω	J 1/20W	RV063	24011101	Res, Chip	100Ω	J 1/20W
RB141	24011101	Res, Chip	100Ω	J 1/20W	RV064	24011101	Res, Chip	100Ω	J 1/20W
RB142	24011221	Res, Chip	220Ω	J 1/20W	RV065	24011101	Res, Chip	100Ω	J 1/20W
RB143	24011222	Res, Chip	2.2kΩ	J 1/20W	RV066	24011182	Res, Chip	1.8kΩ	J 1/20W
RB144	24011101	Res, Chip	100Ω	J 1/20W	RV067	24011272	Res, Chip	2.7kΩ	J 1/20W
RB145	24011221	Res, Chip	220Ω	J 1/20W	RV068	24011102	Res, Chip	1kΩ	J 1/20W
RB146	24011222	Res, Chip	2.2kΩ	J 1/20W	RV069	24011102	Res, Chip	1kΩ	J 1/20W
RB147	24011101	Res, Chip	100Ω	J 1/20W	RV070	24011392	Res, Chip	3.9kΩ	J 1/20W
RB148	24011221	Res, Chip	220Ω	J 1/20W	RV071	24011102	Res, Chip	1kΩ	J 1/20W
RB149	24011222	Res, Chip	2.2kΩ	J 1/20W	RV072	24011100	Res, Chip	10Ω	J 1/20W
RB150	24011101	Res, Chip	100Ω	J 1/20W	RV073	24011182	Res, Chip	1.8kΩ	J 1/20W

LOCATION PART
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RV074	24011272	Res, Chip	2.7k Ω	J 1/20W
RV075	24011472	Res, Chip	4.7k Ω	J 1/20W
RV076	24011101	Res, Chip	100 Ω	J 1/20W
RV077	24011182	Res, Chip	1.8k Ω	J 1/20W
RV078	24011272	Res, Chip	2.7k Ω	J 1/20W
RV079	24011102	Res, Chip	1k Ω	J 1/20W
RV080	24011102	Res, Chip	1k Ω	J 1/20W
RV081	24011392	Res, Chip	3.9k Ω	J 1/20W
RV082	24011102	Res, Chip	1k Ω	J 1/20W
RV083	24011100	Res, Chip	10 Ω	J 1/20W
RV084	24011182	Res, Chip	1.8k Ω	J 1/20W
RV085	24011272	Res, Chip	2.7k Ω	J 1/20W
RV086	24011472	Res, Chip	4.7k Ω	J 1/20W
RV087	24011331	Res, Chip	330 Ω	J 1/20W
RV088	24011331	Res, Chip	330 Ω	J 1/20W
RV089	24011561	Res, Chip	560 Ω	J 1/20W
RV090	24011222	Res, Chip	2.2k Ω	J 1/20W
RV092	24011101	Res, Chip	100 Ω	J 1/20W
RV093	24011392	Res, Chip	3.9k Ω	J 1/20W
RV094	24011392	Res, Chip	3.9k Ω	J 1/20W
RV095	24011823	Res, Chip	82k Ω	J 1/20W
RV096	24011105	Res, Chip	1M Ω	J 1/20W
RV100	24011101	Res, Chip	100 Ω	J 1/20W
RV101	24011101	Res, Chip	100 Ω	J 1/20W
RV111	24011750	Res, Chip	75 Ω	J 1/20W
RV112	24011750	Res, Chip	75 Ω	J 1/20W
RV113	24011223	Res, Chip	22k Ω	J 1/20W
RV114	24011153	Res, Chip	15k Ω	J 1/20W
RV115	24011101	Res, Chip	100 Ω	J 1/20W
RV116	24011272	Res, Chip	2.7k Ω	J 1/20W
RV118	24011223	Res, Chip	22k Ω	J 1/20W
RV119	24011223	Res, Chip	22k Ω	J 1/20W
RV120	24011101	Res, Chip	100 Ω	J 1/20W
RV121	24011272	Res, Chip	2.7k Ω	J 1/20W
RV125	24011153	Res, Chip	15k Ω	J 1/20W
RV126	24011153	Res, Chip	15k Ω	J 1/20W
RV127	24011153	Res, Chip	15k Ω	J 1/20W
RV128	24011153	Res, Chip	15k Ω	J 1/20W
RV129	24011101	Res, Chip	100 Ω	J 1/20W
RV130	24011101	Res, Chip	100 Ω	J 1/20W
RV131	24000449	Res, Chip	6.2k Ω	F 1/16W
RV132	24000573	Res, Chip	1k Ω	F 1/16W
RV133	24000417	Res, Chip	5.1k Ω	F 1/16W
RV134	24000459	Res, Chip	270 Ω	F 1/16W
RV135	24000573	Res, Chip	1k Ω	F 1/16W
RV136	24000606	Res, Chip	8.2k Ω	F 1/16W
RV137	24000552	Res, Chip	390 Ω	F 1/16W
RV138	24000573	Res, Chip	1k Ω	F 1/16W
RV139	24000590	Res, Chip	3k Ω	F 1/16W
RV140	24000573	Res, Chip	1k Ω	F 1/16W
RV141	24000449	Res, Chip	6.2k Ω	F 1/16W
RV142	24000573	Res, Chip	1k Ω	F 1/16W
RV143	24000606	Res, Chip	8.2k Ω	F 1/16W
RV144	24000552	Res, Chip	390 Ω	F 1/16W
RV145	24000573	Res, Chip	1k Ω	F 1/16W
RV146	24011472	Res, Chip	4.7k Ω	J 1/20W
RV147	24011101	Res, Chip	100 Ω	J 1/20W
RV150	24011101	Res, Chip	100 Ω	J 1/20W
RV151	24011101	Res, Chip	100 Ω	J 1/20W
RV152	24011101	Res, Chip	100 Ω	J 1/20W
RV153	24011101	Res, Chip	100 Ω	J 1/20W
RV154	24011101	Res, Chip	100 Ω	J 1/20W
RV155	24011101	Res, Chip	100 Ω	J 1/20W
RV156	24011101	Res, Chip	100 Ω	J 1/20W
RV157	24011101	Res, Chip	100 Ω	J 1/20W
RV158	24011101	Res, Chip	100 Ω	J 1/20W
RV160	24011472	Res, Chip	4.7k Ω	J 1/20W
RV161	24011101	Res, Chip	100 Ω	J 1/20W
RV163	24011472	Res, Chip	4.7k Ω	J 1/20W
RV164	24011472	Res, Chip	4.7k Ω	J 1/20W
RV165	24011472	Res, Chip	4.7k Ω	J 1/20W
RV166	24011472	Res, Chip	4.7k Ω	J 1/20W
RV167	24011472	Res, Chip	4.7k Ω	J 1/20W
RV168	24011472	Res, Chip	4.7k Ω	J 1/20W
RV169	24011472	Res, Chip	4.7k Ω	J 1/20W

LOCATION PART
NUMBER NUMBER DESCRIPTION

RV170	24011123	Res, Chip	12k Ω	J 1/20W
RV171	24011392	Res, Chip	3.9k Ω	J 1/20W
RV172	24011101	Res, Chip	100 Ω	J 1/20W
RV173	24011102	Res, Chip	1k Ω	J 1/20W
RV174	24011471	Res, Chip	470 Ω	J 1/20W
RV175	24011821	Res, Chip	820 Ω	J 1/20W
- MISCELLANEOUS -				
JB001	24000445	Res, Chip Jumper	0 Ω	
JB002	24000445	Res, Chip Jumper	0 Ω	
JB003	24000445	Res, Chip Jumper	0 Ω	
PV001	23903047	Socket	DSUB	
PV002	23903047	Socket	DSUB	
PV003	23365444	Earphone Jack		
PV004	23365684	Phono Jack	S-VHS, 4P	
PV005	23365833	Phono Jack	3P	
PV008	23164559	Plug	7P, 2.5mm	
PV009	23903052	Socket	FPC/FFC	
PV010	23903046	Socket	1mm, 50P	
PV012	23368672	Plug	26P	
PV013	23368241	Plug	13P	
SV001	70145484	Switch	SPVF11	
ZV001	23153961	Crystal,	3.58MHz	
ZV002	23153471	Crystal	4.43MHz	
ZV003	70132486	Filter	LPF	
ZV004	70132486	Filter	LPF	
ZV005	23103823	Filter	TEM2027D	
ZV006	23103823	Filter	TEM2027D	
ZV007	23103823	Filter	TEM2027D	
ZV008	23103823	Filter	TEM2027D	
ZV009	23103823	Filter	TEM2027D	
ZV011	23103823	Filter	TEM2027D	
ZV012	23103823	Filter	TEM2027D	
U0032	23781607	PC Board Assy	Audio	
- INTEGRATED CIRCUITS -				
QA01	23318752	IC	M5222FP	
QA02	23906399	IC	LA4425A	
- TRANSISTORS -				
QA03	A6335470	Transistor, Chip	2SC2712-Y	
QA04	A6335470	Transistor, Chip	2SC2712-Y	
QA05	A6004020	Transistor, Chip	RN1402	
- DIODES -				
DA01	A7150800	Diode, Chip	1SS187	
DA02	23118287	Diode, Chip	RD12M	
DA03	23118287	Diode, Chip	RD12M	
- CAPACITORS -				
CA11	24619100	Cap, Chip	10 μ F	M 16V
CA12	24619100	Cap, Chip	10 μ F	M 16V
CA13	24619141	Cap, Chip	2.2 μ F	M 50V
CA14	24619141	Cap, Chip	2.2 μ F	M 50V
CA15	24619141	Cap, Chip	2.2 μ F	M 50V
CA16	24666471	Cap, Electrolytic	470 μ F	M 16V
CA17	24666471	Cap, Electrolytic	470 μ F	M 16V
CA18	24619141	Cap, Chip	2.2 μ F	M 50V
CA20	24092399	Cap, Chip	0.1 μ F	Z 16V
CA21	24619100	Cap, Chip	10 μ F	M 16V
CA22	24619100	Cap, Chip	10 μ F	M 16V
CA24	24092399	Cap, Chip	0.1 μ F	Z 16V
CA25	24092399	Cap, Chip	0.1 μ F	Z 16V
- RESISTORS -				
RA11	24011473	Res, Chip	47k Ω	J 1/20W
RA12	24011473	Res, Chip	47k Ω	J 1/20W
RA13	24011104	Res, Chip	100k Ω	J 1/20W
RA14	24011392	Res, Chip	3.9k Ω	J 1/20W
RA15	24011473	Res, Chip	47k Ω	J 1/20W
RA16	24011472	Res, Chip	4.7k Ω	J 1/20W
RA17	24011123	Res, Chip	12k Ω	J 1/20W
RA18	24011472	Res, Chip	4.7k Ω	J 1/20W
RA19	24011123	Res, Chip	12k Ω	J 1/20W
RA20	24011472	Res, Chip	4.7k Ω	J 1/20W
RA22	24011621	Res, Chip	620 Ω	J 1/20W
RA27	24011101	Res, Chip	100 Ω	J 1/20W
RA28	24011101	Res, Chip	100 Ω	J 1/20W
RA29	24011182	Res, Chip	1.8k Ω	J 1/20W
RA30	24011102	Res, Chip	1k Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION				LOCATION NUMBER	PART NUMBER	DESCRIPTION			
RA31	24011104	Res, Chip	100kΩ	J	1/20W	RM004	24011103	Res, Chip	10kΩ	J	1/20W
RA32	24011182	Res, Chip	1.8kΩ	J	1/20W	RM005	24011302	Res, Chip	3kΩ	J	1/20W
RA33	24011102	Res, Chip	1kΩ	J	1/20W	RM006	24011102	Res, Chip	1kΩ	J	1/20W
RA34	24011104	Res, Chip	100kΩ	J	1/20W	RM008	24011101	Res, Chip	100Ω	J	1/20W
RA41	24011102	Res, Chip	1kΩ	J	1/20W	RM009	24011104	Res, Chip	100kΩ	J	1/20W
RA42	24011102	Res, Chip	1kΩ	J	1/20W	RM010	24011273	Res, Chip	27kΩ	J	1/20W
		- MISCELLANEOUS -				RM011	24011183	Res, Chip	18kΩ	J	1/20W
PV006	23365444	Earphone Jack				RM012	24011101	Res, Chip	100Ω	J	1/20W
PV007	23901448	Connector				RM013	24011102	Res, Chip	1kΩ	J	1/20W
PV014	23902760	Socket	13P			RM014	24011102	Res, Chip	1kΩ	J	1/20W
QA02C	70391354	Screw	3x6mm			RM015	24011104	Res, Chip	100kΩ	J	1/20W
■U0041	23781073	PC Board Assy	Inverter, TLP511			RM016	24011273	Res, Chip	27kΩ	J	1/20W
		- INTEGRATED CIRCUITS -				RM017	24011101	Res, Chip	100Ω	J	1/20W
QM002	70129738	IC	PQ20VZ1U			RM018	24011153	Res, Chip	15kΩ	J	1/20W
QM007	70128490	IC	MM1031M			RM019	24011102	Res, Chip	1kΩ	J	1/20W
QM008	A6030620	IC	TC7S04F			RM020	24011153	Res, Chip	15kΩ	J	1/20W
		- TRANSISTORS -				RM021	24011682	Res, Chip	6.8kΩ	J	1/20W
QI001	A6014040	Transistor, Chip	RN2404			RM022	24011102	Res, Chip	1kΩ	J	1/20W
QI002	A6014040	Transistor, Chip	RN2404			RM023	24011122	Res, Chip	1.2kΩ	J	1/20W
QI003	23314142	Transistor	2SC3834			RM024	24011101	Res, Chip	100Ω	J	1/20W
QM001	A6014040	Transistor, Chip	RN2404			RM025	24011222	Res, Chip	2.2kΩ	J	1/20W
QM003	A6335477	Transistor, Chip	2SC2712-Y			RM026	24011750	Res, Chip	75Ω	J	1/20W
QM004	A6335477	Transistor, Chip	2SC2712-Y			RM027	24011104	Res, Chip	100kΩ	J	1/20W
QM005	A6335477	Transistor, Chip	2SC2712-Y			RM028	24011102	Res, Chip	1kΩ	J	1/20W
QM006	A6335477	Transistor, Chip	2SC2712-Y			RM029	24011334	Res, Chip	330kΩ	J	1/20W
		- DIODES -				RM999	24366101	Res, Carbon	100Ω	J	1/6W
DI001	A7150800	Diode, Chip	1SS187					- MISCELLANEOUS -			
DI002	A7150800	Diode, Chip	1SS187			PM001	23368673	Plug	26P		
DI003	23118317	Diode, Chip	RD2. 4M-T1BB			PM007	23363252	Phono Jack			
DI004	23118317	Diode, Chip	RD2. 4M-T1BB			SM005	23145364	Switch, Slide	1C2P		
DI005	A7150800	Diode, Chip	1SS187			ZM001	23906419	Photo Reciever	RPM676CBRS02		
DI006	23316725	Diode, Zener	MTZJ15B			ZM002	23103823	Filter	TEM2027D		
DM001	23118313	Diode, Chip	RD6. 2M			ZM003	23107622	Filter	TEM1018		
DM002	A7150800	Diode, Chip	1SS187			■U0042	23781074	PC Board Assy	SW, TLP511		
DM003	A7150800	Diode, Chip	1SS187					- MISCELLANEOUS -			
DM004	23118313	Diode, Chip	RD6. 2M			SM001	23145226	Switch, Push	1C1P		
DM005	23118313	Diode, Chip	RD6. 2M			SM002	23145226	Switch, Push	1C1P		
		- COILS -				SM003	23145226	Switch, Push	1C1P		
LI001	23221746	Coil, Choke	TLN3155D			SM004	23145226	Switch, Push	1C1P		
▲LI002	23217369	Power Transformer	TPW3382AD			■U501	70186900	P C Board Assy	Camera Video, TLP511		
LM001	23103880	Coil, Choke	TEM2011Y					- INTEGRATED CIRCUITS -			
LM002	23103880	Coil, Choke	TEM2011Y			Q103	70200150	IC	CXD1267AN		
		- CAPACITORS -				Q201	70200663	IC	HD49322BF		
CI001	24666331	Cap, Electrolytic	330μF	M	16V	Q202	A6030893	IC	TC7W32FU		
CI002	24666470	Cap, Electrolytic	47μF	M	16V	Q203	70200423	IC	HD49811TFA		
CI003	24815473	Cap, Chip	0.047μF	K	50V	Q206	70128705	IC	MM1024AF		
CI004	24820392	Cap, Plastic	3900pF	J	630V	Q301	A6030629	IC	TC7S04FU		
CM001	24619102	Cap, Chip	47μF	M	16V	Q302	A6030791	IC	TC7W74FU		
CM002	24092399	Cap, Chip	0.1μF	Z	16V	Q303S	70200606	IC	6473337PROG		
CM003	24619102	Cap, Chip	47μF	M	16V	Q304	70200127	IC	UPD4721GS		
CM004	24092399	Cap, Chip	0.1μF	Z	16V	Q305	70200430	IC	RN5VD27A		
CM005	24619102	Cap, Chip	47μF	M	16V	Q306	70200656	IC	AK93C65AV		
CM007	24619102	Cap, Chip	47μF	M	16V	Q801	B0370000	IC	TA78L05F		
CM008	24092399	Cap, Chip	0.1μF	Z	16V	Q802	70129738	IC	PQ20VZ1U		
CM010	24619100	Cap, Chip	10μF	M	16V	Q803	70200328	IC	PQ05S21U		
CM011	24619100	Cap, Chip	10μF	M	16V	Q806	A6030629	IC	TC7S04FU		
CM012	24619141	Cap, Chip	2.2μF	M	50V			- TRANSISTORS -			
CM013	24092399	Cap, Chip	0.1μF	Z	16V	Q102	23314507	Transistor, Chip	2SC3931-C		
CM014	24665471	Cap, Electrolytic	470μF	M	10V	Q204	A6063920	Transistor, Chip	2SK880-Y		
CM015	24092399	Cap, Chip	0.1μF	Z	16V	Q205	A6549570	Transistor, Chip	2SA1586-Y		
CM999	24591104	Cap, Plastic	0.1μF	J	50V	Q307	23314351	Transistor, Chip	XN6213		
		- RESISTORS -				Q308	23314351	Transistor, Chip	XN6213		
RI001	24011822	Res, Chip	8.2kΩ	J	1/20W	Q309	23314271	Transistor, Chip	UN5213		
RI002	24011103	Res, Chip	10kΩ	J	1/20W	Q804	23314888	Transistor, Chip	UMZ1N		
RI003	24011242	Res, Chip	2.4kΩ	J	1/20W	Q805	23314888	Transistor, Chip	UMZ1N		
RI004	24011182	Res, Chip	1.8kΩ	J	1/20W			- DIODES -			
RI005	24011479	Res, Chip	4.7Ω	J	1/20W	D101	23118041	Diode, Chip	MA111		
RI006	24011330	Res, Chip	33Ω	J	1/20W	D102	A7154050	Diode, Chip	1SS301		
RI007	24011471	Res, Chip	470Ω	J	1/20W	D103	23118041	Diode, Chip	MA111		
RI009	24019423	Posistor	PTH9M04BD471			D201	23118255	Diode, Chip	1T363-T8-T04		
RI010	24011102	Res, Chip	1kΩ	J	1/20W	D801	23316895	Diode, Zener	DT28. 2B		
RM001	24011100	Res, Chip	10Ω	J	1/20W	D802	23316915	Diode, Zener	DTZ15C		
RM002	24011100	Res, Chip	10Ω	J	1/20W	D803	A7155540	Diode, Chip	1SS372		
RM003	24011154	Res, Chip	150kΩ	J	1/20W						

LOCATION PART
NUMBER NUMBER DESCRIPTION

D804 A7154100 Diode, Chip 1SS302
- COILS -
L201 23245858 Coil, Chip TRF4100CC
L202 23245858 Coil, Chip TRF4100CC
L203 23245858 Coil, Chip TRF4100CC
L204 23245858 Coil, Chip TRF4100CC
L205 23245858 Coil, Chip TRF4100CC
L206 23245858 Coil, Chip TRF4100CC
L302 23245858 Coil, Chip TRF4100CC
L801 23245862 Coil, Chip TRF4221CC

- CAPACITORS -

C101 24100104 Cap, Chip 0.1 μ F Z 25V
C102 24100104 Cap, Chip 0.1 μ F Z 25V
C103 24092538 Cap, Chip 1 μ F Z 10V
C104 24088080 Cap, Chip 33 μ F M 10V
C105 24105120 Cap, Chip 12pF J 50V
C106 24109103 Cap, Chip 0.01 μ F K 25V
C107 24100104 Cap, Chip 0.1 μ F Z 25V
C108 24088082 Cap, Chip 1 μ F M 35V
C109 24100104 Cap, Chip 0.1 μ F Z 25V
C110 24100104 Cap, Chip 0.1 μ F Z 25V
C111 24100104 Cap, Chip 0.1 μ F Z 25V
C112 24100104 Cap, Chip 0.1 μ F Z 25V
C113 24100104 Cap, Chip 0.1 μ F Z 25V
C114 24100104 Cap, Chip 0.1 μ F Z 25V
C201 24092441 Cap, Chip 1 μ F Z 16V
C203 24100104 Cap, Chip 0.1 μ F Z 25V
C204 24100104 Cap, Chip 0.1 μ F Z 25V
C205 24100104 Cap, Chip 0.1 μ F Z 25V
C207 24088080 Cap, Chip 33 μ F M 10V
C208 24092538 Cap, Chip 1 μ F Z 10V
C209 24100104 Cap, Chip 0.1 μ F Z 25V
C210 24100104 Cap, Chip 0.1 μ F Z 25V
C215 24100104 Cap, Chip 0.1 μ F Z 25V
C216 24088078 Cap, Chip 15 μ F M 6.3V
C217 24100104 Cap, Chip 0.1 μ F Z 25V
C218 24100104 Cap, Chip 0.1 μ F Z 25V
C219 24100104 Cap, Chip 0.1 μ F Z 25V
C220 24100104 Cap, Chip 0.1 μ F Z 25V
C221 24088080 Cap, Chip 33 μ F M 10V
C222 24105220 Cap, Chip 22 μ F J 50V
C223 24105220 Cap, Chip 22 μ F J 50V
C224 24105220 Cap, Chip 22 μ F J 50V
C225 24100104 Cap, Chip 0.1 μ F Z 25V
C227 24100104 Cap, Chip 0.1 μ F Z 25V
C228 24100104 Cap, Chip 0.1 μ F Z 25V
C229 24088966 Cap, Chip 10 μ F M 4V
C230 24088966 Cap, Chip 10 μ F M 4V
C231 24088966 Cap, Chip 10 μ F M 4V
C233 24088080 Cap, Chip 33 μ F M 10V
C234 24088078 Cap, Chip 15 μ F M 6.3V
C235 24100104 Cap, Chip 0.1 μ F Z 25V
C236 24105220 Cap, Chip 22 μ F J 50V
C238 24109102 Cap, Chip 1000pF K 50V
C239 24109102 Cap, Chip 1000pF K 50V
C240 24100104 Cap, Chip 0.1 μ F Z 25V
C241 24088080 Cap, Chip 33 μ F M 10V
C242 24100104 Cap, Chip 0.1 μ F Z 25V
C243 24092441 Cap, Chip 1 μ F Z 16V
C244 24619096 Cap, Chip 22 μ F M 6.3V
C245 24619098 Cap, Chip 100 μ F M 6.3V
C246 24619098 Cap, Chip 100 μ F M 6.3V
C247 24619096 Cap, Chip 22 μ F M 6.3V
C248 24100104 Cap, Chip 0.1 μ F Z 25V
C249 24100104 Cap, Chip 0.1 μ F Z 25V
C301 24100104 Cap, Chip 0.1 μ F Z 25V
C303 24100104 Cap, Chip 0.1 μ F Z 25V
C305 24100104 Cap, Chip 0.1 μ F Z 25V
C307 24088080 Cap, Chip 33 μ F M 10V
C314 24092441 Cap, Chip 1 μ F Z 16V
C315 24092441 Cap, Chip 1 μ F Z 16V
C316 24092441 Cap, Chip 1 μ F Z 16V
C318 24092441 Cap, Chip 1 μ F Z 16V
C319 24092441 Cap, Chip 1 μ F Z 16V
C320 24100104 Cap, Chip 0.1 μ F Z 25V

LOCATION PART
NUMBER NUMBER DESCRIPTION

C801 24092538 Cap, Chip 1 μ F Z 10V
C802 24100104 Cap, Chip 0.1 μ F Z 25V
C803 24100104 Cap, Chip 0.1 μ F Z 25V
C804 24100104 Cap, Chip 0.1 μ F Z 25V
C805 24088078 Cap, Chip 15 μ F M 6.3V
C806 24100104 Cap, Chip 0.1 μ F Z 25V
C807 24088964 Cap, Chip 4.7 μ F M 20V
C808 24088080 Cap, Chip 33 μ F M 10V
C809 24619100 Cap, Chip 10 μ F M 16V
C810 24619106 Cap, Chip 33 μ F M 25V
C811 24619100 Cap, Chip 10 μ F M 16V
C812 24619100 Cap, Chip 10 μ F M 16V
C813 24100104 Cap, Chip 0.1 μ F Z 25V
C814 24100104 Cap, Chip 0.1 μ F Z 25V

- RESISTORS -

R101 24011105 Res, Chip 1M Ω J 1/20W
R102 24011104 Res, Chip 100k Ω J 1/20W
R103 24011393 Res, Chip 39k Ω J 1/20W
R104 24011101 Res, Chip 100 Ω J 1/20W
R105 24011821 Res, Chip 820 Ω J 1/20W
R106 24011101 Res, Chip 100 Ω J 1/20W
R107 24011472 Res, Chip 4.7k Ω J 1/20W
R112 24011104 Res, Chip 100k Ω J 1/20W
R201 24011243 Res, Chip 24k Ω J 1/20W
R202 24011221 Res, Chip 220 Ω J 1/20W
R203 24011221 Res, Chip 220 Ω J 1/20W
R204 24011221 Res, Chip 220 Ω J 1/20W
R205 24011221 Res, Chip 220 Ω J 1/20W
R206 24011331 Res, Chip 330 Ω J 1/20W
R207 24011102 Res, Chip 1k Ω J 1/20W
R208 24011102 Res, Chip 1k Ω J 1/20W
R209 24011102 Res, Chip 1k Ω J 1/20W
R211 24011101 Res, Chip 100 Ω J 1/20W
R215 24011752 Res, Chip 7.5k Ω J 1/20W
R216 24011752 Res, Chip 7.5k Ω J 1/20W
R217 24000445 Res, Chip Jumper 0 Ω
R218 24000445 Res, Chip Jumper 0 Ω
R219 24011471 Res, Chip 470 Ω J 1/20W
R220 24011105 Res, Chip 1M Ω J 1/20W
R221 24011104 Res, Chip 100k Ω J 1/20W
R222 24011472 Res, Chip 4.7k Ω J 1/20W
R223 24011183 Res, Chip 18k Ω J 1/20W
R224 24011101 Res, Chip 100 Ω J 1/20W
R225 24011102 Res, Chip 1k Ω J 1/20W
R227 24011102 Res, Chip 1k Ω J 1/20W
R228 24011472 Res, Chip 4.7k Ω J 1/20W
R229 24011102 Res, Chip 1k Ω J 1/20W
R230 24011102 Res, Chip 1k Ω J 1/20W
R231 24011182 Res, Chip 1.8k Ω J 1/20W
R232 24011105 Res, Chip 1M Ω J 1/20W
R233 24998750 Res, Chip 75k Ω D 1/16W
R234 24998750 Res, Chip 75k Ω D 1/16W
R235 24998750 Res, Chip 75k Ω D 1/16W
R236 24011222 Res, Chip 2.2k Ω J 1/20W
R305 24011331 Res, Chip 330 Ω J 1/20W
R308 24011101 Res, Chip 100 Ω J 1/20W
R309 24011105 Res, Chip 1M Ω J 1/20W
R313 24000445 Res, Chip Jumper 0 Ω
R314 24011474 Res, Chip 470k Ω J 1/20W
R315 24011472 Res, Chip 4.7k Ω J 1/20W
R801 24011162 Res, Chip 1.6k Ω J 1/20W
R802 24011102 Res, Chip 1k Ω J 1/20W
R803 24011101 Res, Chip 100 Ω J 1/20W
R804 24011471 Res, Chip 470 Ω J 1/20W
R805 24011103 Res, Chip 10k Ω J 1/20W

- MISCELLANEOUS -

F801 70144823 Fuse, Chip 1A
Z201 70132524 Crystal FCX0-03, 28.5M
Z202 70132526 Crystal FCX-03, 17.7M
Z203 70132525 Filter BPF, 4.43M
Z204 70132523 Filter LPF, 7M
Z801 70131229 Coil, Chip HF50ACC3225T
Z802 70131229 Coil, Chip HF50ACC3225T

SPECIFICATIONS

[Main Unit]

Power requirements	AC 100 – 240V 50/60Hz
Power consumption	TLP510: 200W
	TLP511: 205W
Mass	TLP510: 6.8 Kg
	TLP511: 8.2 Kg
Dimensions	TLP510: 340 x 138 x 295 (mm) (W/H/D) (Including the projecting sections)
	TLP511: 340 x 138 x 365 (mm) (W/H/D) (Including the projecting sections)
Ambient environment	Temperature: 0°C to 35°C Humidity: 30% to 70% RH
Lamp	UHP lamp 120W
Speaker	1.5W (monaural)
RGB inputs	RGB signal (D-sub 15-pin) Audio: 1V(p-p), more than 22k Ω , ϕ 3.5mm stereo mini jack
VIDEO inputs	S-video signal : Y input: 1V(p-p), 75 Ω , negative synchronization (Mini DIN 4-pin) C input: 0.286V(p-p) (burst signal), 75 Ω Video: 1V(p-p), 75 Ω , negative synchronization, pin jack Audio: 1V(p-p), more than 22k Ω , pin jacks (L, R)
Outputs	RGB signal (D-sub 15-pin) Audio: 1V(p-p), less than 2.2k Ω , ϕ 3.5mm stereo mini jack
CONTROL terminal	D-sub 9-pin (RS-232C)
Cabinet Material	ABS resin

[Liquid Crystal Display]

Projection system	3-pannels transmission
Panel size	1.3 inches
Driving system	TFT active matrix
Picture elements	786,432 (1024 x 768 dots) x 3

[Projection Lens]

Lens	Zooming lens F=2.5 – 3.0 f=50 – 70mm
Focusing	Manual operation
Zooming	Manual operation

[Document Imaging Camera]

Lens	F=1.8 – 2.3, f=5.8 – 17.4mm
Filming area	Max 290 (mm) horizontal, 217 (mm) vertical (WIDE)
Zoom	Motor-driven (Manual)
Focus	Motor-driven (Manual)
Iris	Auto/Lever adjustment allowed
TV signal	PAL
Image element	1/3 inch CCD
Total picture elements	480,000
Resolution	Horizontal 450, vertical 420
Lighting	4W fluorescent light
Output Terminal	Pin jack PAL signal

[Accessories]

Wireless remote control	1
AA size battery	2 (TLP510A, TLP511A)
R6 size battery	2 (TLP510Z, TLP511Z)
Power cord	1 (2: TLP510Z, TLP511Z)
RGB cable	1
Adapter for Macintosh computers	1
Audio/video cable	1
Lens cover	1 (Only the document imaging camera model)
Pad	1
Infrared remote sensor unit.....	1
IBM/MAC cable (for infrared remote sensor unit)	1
MAC cable (for infrared remote sensor unit)	1

The design and specifications are subject to change without notice.

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TOSHIBA CORPORATION

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

TOSHIBA

FILE NO. 330-9706

SERVICE MANUAL

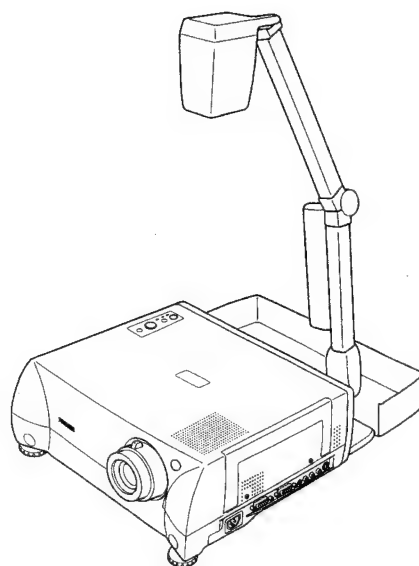


V19577

3LCD DATA PROJECTOR

TLP510U, TLP511U

TLP510E, TLP511E

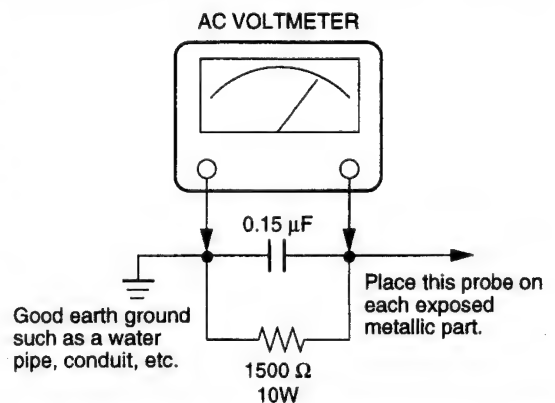


TLP511U

SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this projector. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
3. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V (TLP510U, TLP511U)/240V (TLP510E, TLP511E) AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 Ω per volt or more sensitivity in the following manner: Connect a 1500 Ω 10W resistor, paralleled by a 0.15 μ F, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 Ω resistor and 0.15 μ F capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 5.25V(rms). This corresponds to 3.5 mA(AC). Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

ULTRAVIOLET DANGER IN SERVICE MODE

Eye damage may result from directly viewing the light produced by the lamp used in this product. Always turn off lamp before opening this cover. Ultraviolet radiation eye protection required during servicing.

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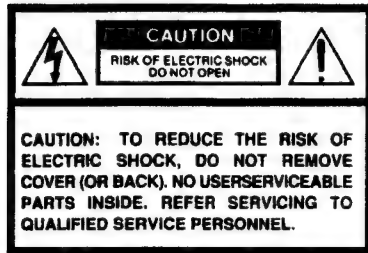
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SAFETY PRECAUTIONS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

<TLP510U, TLP511U>

WARNING

FCC Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

DOC compliance notice

This digital apparatus does not exceed the Class A limit for radio noise emissions from digital apparatuses as set forth in the Radio Interference Regulations of the Canadian Department of Communications.

IMPORTANT PRECAUTIONS

Save Original Packing Materials

The original shipping carton and packing materials will come in handy if you ever have to ship your LCD projector. For maximum protection, repack the set as it was originally packed at the factory.

Avoid Volatile Liquid

Do not use volatile liquids, such as an insect spray, near the unit.
Do not leave rubber or plastic products touching the unit for a long time. They will mar the finish.

Moisture Condensation

Never operate this unit immediately after moving it from a cold location to a warm location. When the unit is exposed to such a change in temperature, moisture may condense on the crucial internal parts. To prevent the unit from possible damage, do not use the unit for at least 2 hours when there is an extreme or sudden change in temperature.

In the spaces provided below, record the Model and Serial No. located at the rear of your LCD projector.

Model No. _____ Serial No. _____

Retain this information for future reference.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS GIVEN IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. Read owner's manual

After unpacking this product, read the owner's manual carefully, and follow all the operating and other instructions.



2. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.



3. Source of Light

Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes or sight.



4. Ventilation

Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.



5. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



IMPORTANT SAFETY INSTRUCTIONS

6. Water and Moisture

Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.



7. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.



8. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.



9. Overloading

Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.



10. Lightning

For added protection for this product during storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.

This will prevent damage to the product due to lightning and power-line surges.



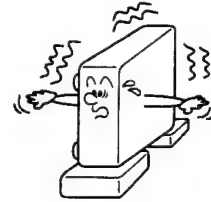
11. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.



12. Do not place the product vertically

Do not use the product in the upright position to project the pictures at the ceiling, or any other vertical positions.
It may fall down and dangerous.



13. Stack inhibited

Do not stack other equipment on this product or do not place this product on the other equipment. Top and bottom plates of this product develops heat and may give some undesirable damage to other unit.



14. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

15. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



16. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

17. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



18. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

(Replacement of the lamp only should be made by users.)

19. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.



20. Do not get your hands between the camera arm and the main unit when setting the camera arm back in its original position.

To avoid injury, be careful not to get your hands caught when setting the camera arm back in its original position. Families with children should be particularly careful.



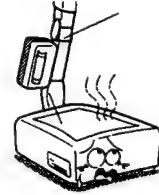
21. Do not carry by the camera arm.

Do not carry the projector by the camera arm. Doing so can result in damage or injury.



22. Do not leave documents on the unit for long periods of time while using the document imaging function.

Do not leave texts, papers or other documents for projection on the unit for long periods of time. The heat could erase the letters on a thermal paper.

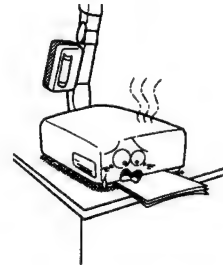


23. Before replacing the fluorescent light, turn off the power and wait at least one hour for the fluorescent light to cool down.

The fluorescent light gets hot, so handle it with care. Failure to do so may result in burns or other injuries.

24. Do not leave documents in the bottom of the projector.

Documents can block the air intake holes, making the inside of the projector heat up and causing breakdowns.



25. Do not move the projector while the arm is still erect.

Always store the arm back in position when moving the projector. Otherwise injury or damage may result.



26. Camera section is not locked. Do not hold the camera cover and camera unit when carrying out, etc.

Danger such as dropping, or cause of failure and injury may result.



SECTION 1

PART REPLACEMENT AND ADJUSTMENT PROCEDURES

1. LOCATION OF MAIN PARTS

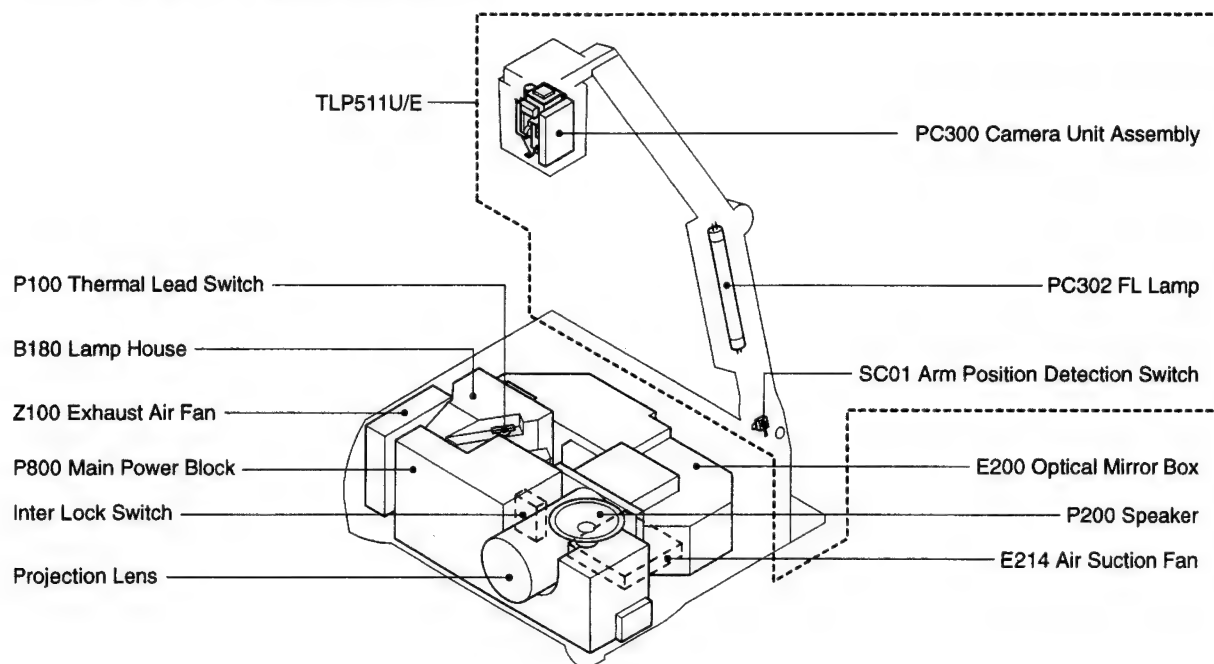


Fig. 1-0-1

2. LOCATION OF PC BOARDS

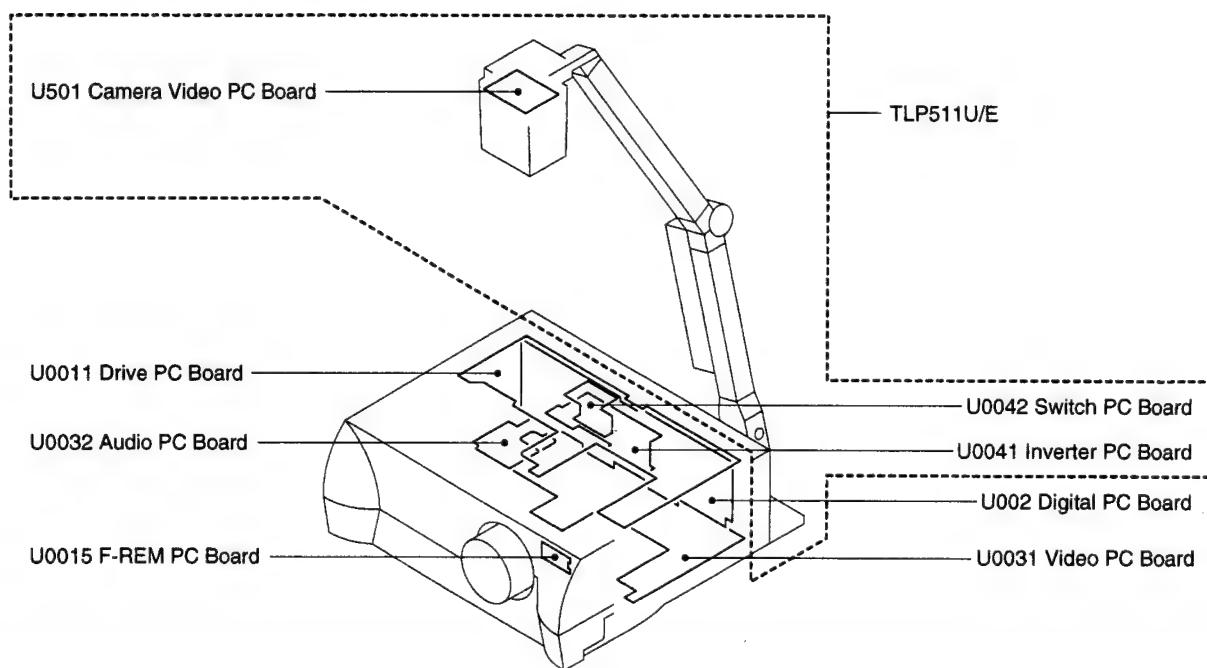


Fig. 2-0-1

CAUTIONS BEFORE STARTING SERVICING

Electronic parts are susceptible to static electricity and may easily be damaged, so do not forget to take a proper grounding treatment as required.

Many screws are used inside the unit. To prevent missing, dropping, etc. of the screws, always use a magnetized screwdriver in servicing. Several kinds of screws are used and some of them need special cautions. That is, take care of the tapping screws securing molded parts and fine pitch screws used to secure metal parts. If they are used improperly, the screw holes will be easily damaged and the parts can not be fixed.

3. DISASSEMBLING

3-1. Main Unit (1)

3-1-1. Document Camera (TLP511U/E)

1. Remove 4 screws (1) and remove document camera rear plate.
2. Disconnect 1 connector (2) connected to the document camera.
3. Remove 5 screws (3) and remove the document camera.

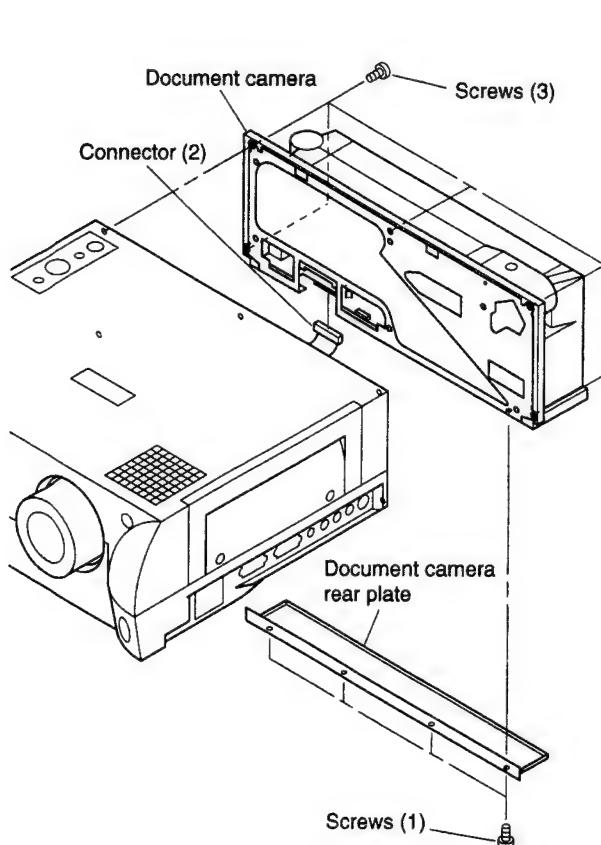


Fig. 3-1-1

3-1-2. Top Cover and Speaker

1. Remove document camera. (TLP511U/E: Refer to Fig. 3-1-1.)
2. Remove top tag and remove 1 screw (1).
3. Remove 6 screws (2) and lift up top cover while pressing section A of the top cover.
4. Remove speaker connector (3) and remove top cover.
5. Remove 2 screws (4) securing speaker holder, and remove speaker from speaker holder.

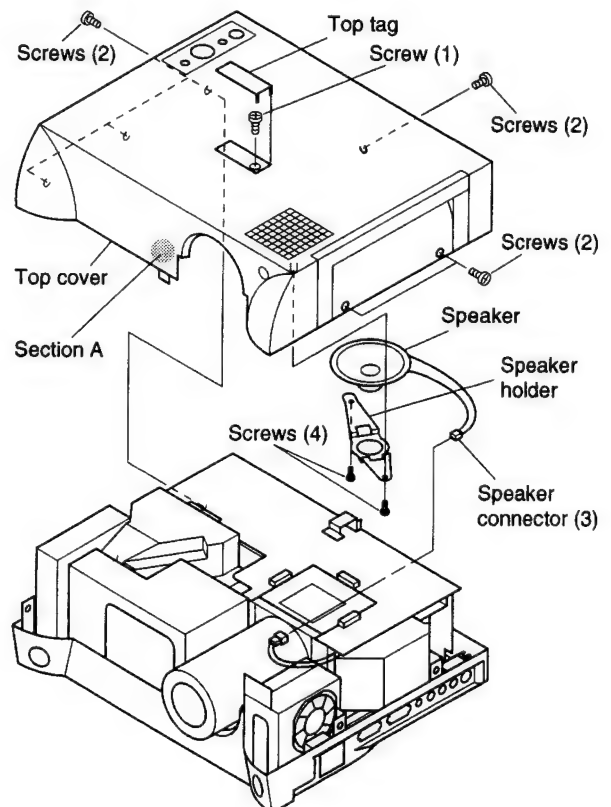


Fig. 3-1-2

3-1-3. Drive PC Board and F-REM PC Board

1. Remove 1 screw (1) and remove reinforcement metal plate.
2. Remove 6 screws (2) securing drive PC board.
3. Remove 3 flexible cables (3) from LCD panel and 2 flexible cables (4) from the rear side.
4. Disconnect 8 connectors (5) from drive PC board.
5. Confirm all the connector are disconnected and then lift up the drive PC board.
6. Remove 1 screw (6).
7. Remove 1 connector (7) and remove F-REM PC Board.

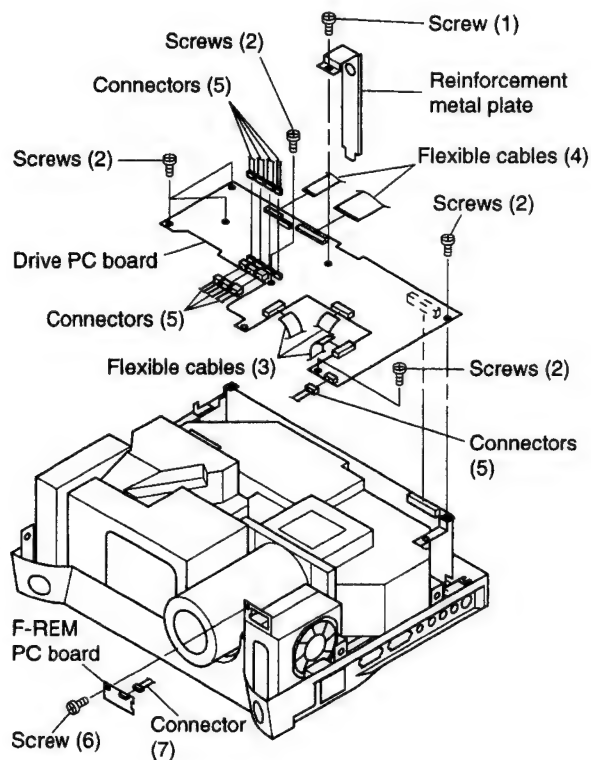


Fig. 3-1-3

3-1-4. Digital PC Board

1. Remove drive PC board. (Refer to Fig. 3-1-3.)
2. Remove 1 connector (1).
3. Lift up digital PC board.

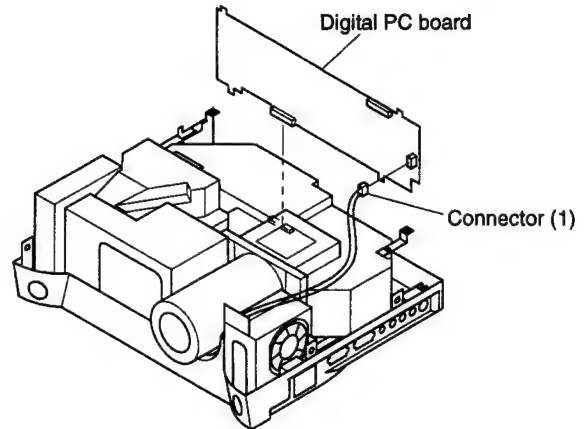


Fig. 3-1-4

3-1-5. Lamp House Assembly and Exhaust Fan

Note:

- Remove the lamp unit in advance. (Refer to Owner's Manual.)
1. Remove 2 connectors (1).
 2. Remove 2 screws (2) and disconnect socket.
 3. Remove 3 screws (3) and remove lamp house assembly.
 4. Remove 2 screws (4) and remove exhaust fan.
 5. Remove 1 screw (5) and remove exhaust fan mounting frame.

< When removing the exhaust fan >

Make sure the top cover is removed. Remove 2 screws (4) and disconnect connector of fan lead, and the fan will be removed.

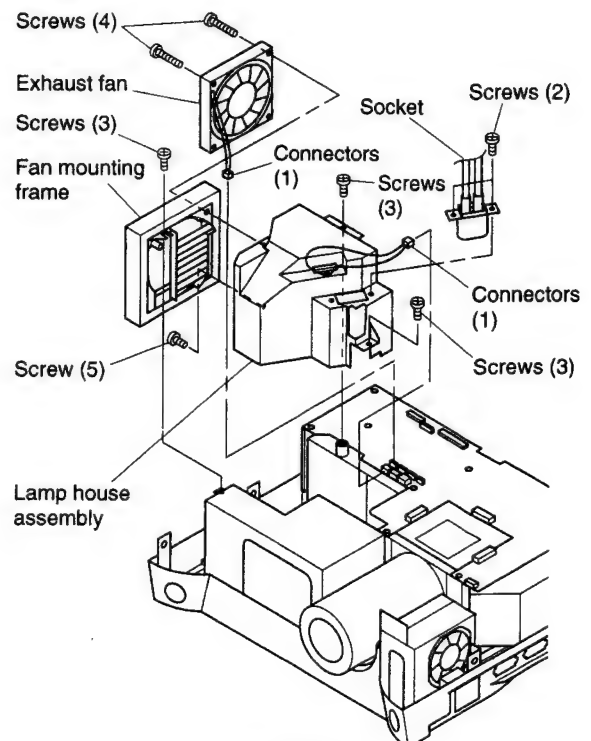


Fig. 3-1-5

3-1-6. Optical Box and Air Suction Fan

1. Remove drive PC Board. (Refer to Fig. 3-1-3.)
2. Remove lamp house assembly. (Refer to Fig. 3-1-5.)
3. Remove 2 screws (1) and remove PC board holder bracket.
4. Remove 3 screws (2) and remove metal fitting.
5. Remove 4 screws (3) and remove optical box lifting upward.
6. Remove 2 screws (4) and remove air suction fan.

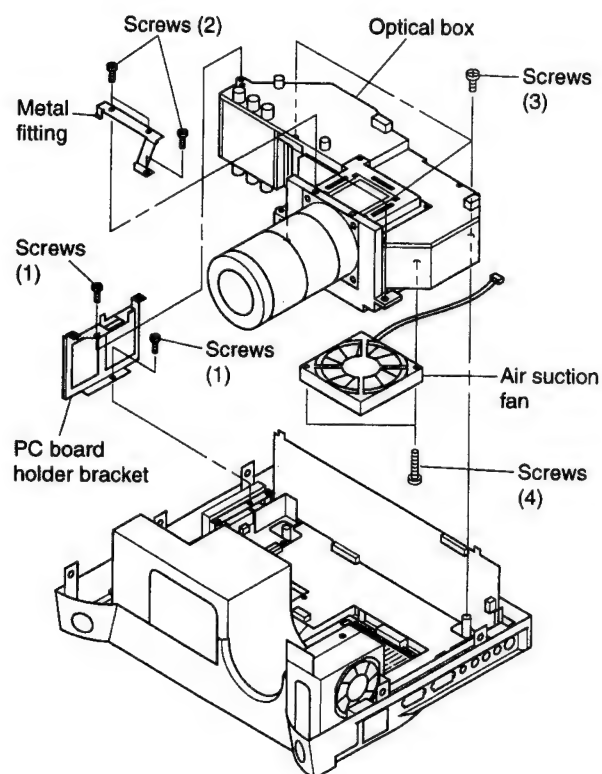


Fig. 3-1-6

3-1-7. Main Power Supply Block

1. Remove drive PC board. (Refer to Fig. 3-1-3.)
2. Remove lamp house assembly. (Refer to Fig. 3-1-5.)
3. Remove optical box. (Refer to Fig. 3-1-6.)
4. Remove 1 connector (1).
5. Remove 4 screws (2) and remove main power supply block.

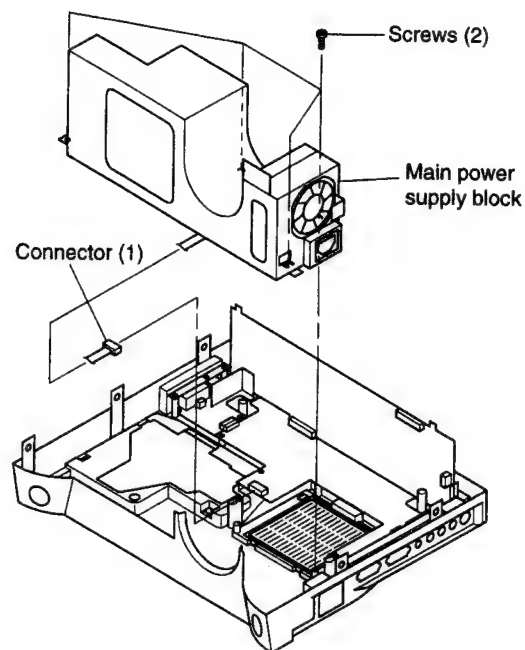


Fig. 3-1-7

3-1-8. Video PC Board and Audio PC Board

1. Remove drive PC board. (Refer to Fig. 3-1-3.)
2. Remove lamp house assembly. (Refer to Fig. 3-1-5.)
3. Remove optical box. (Refer to Fig. 3-1-6.)
4. Disconnect joint of Video PC board and audio PC board.
5. Remove 1 connector (1) of Video PC board.
6. Remove 8 screws (2) and remove Video PC board.
7. Remove 3 screws (3) and remove audio PC board.

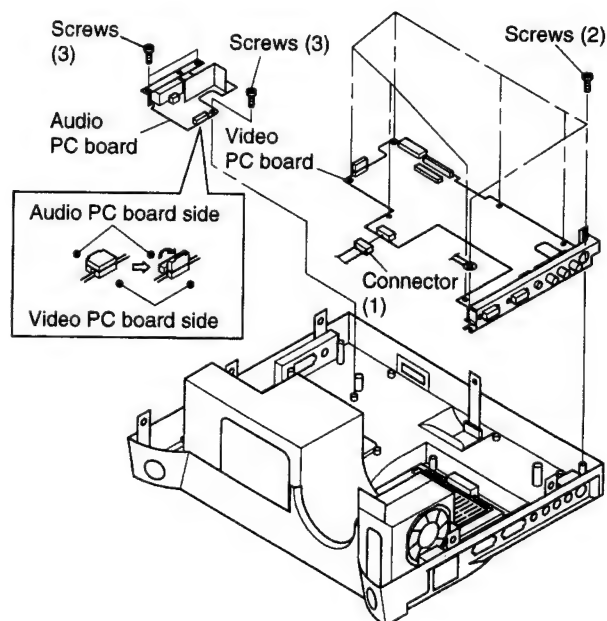


Fig. 3-1-8

3-2. Main Unit (2) – Optical Box

3-2-1. Lens

1. Remove optical box. (Refer to Fig. 3-1-6.)
2. Remove 4 screws (1) and remove lens.

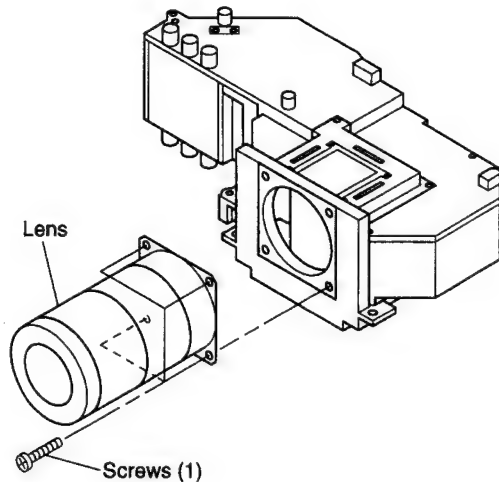


Fig. 3-2-1

3-2-2. Filter Cover and Mirror Block Cover

1. Remove optical box. (Refer to Fig. 3-1-6.)
2. Peel off tape covering openings around FPC section of each color LCD on the filter cover.
3. Remove 4 screws (1) and remove filter cover.
4. Remove 6 screws (2) and remove mirror block cover.

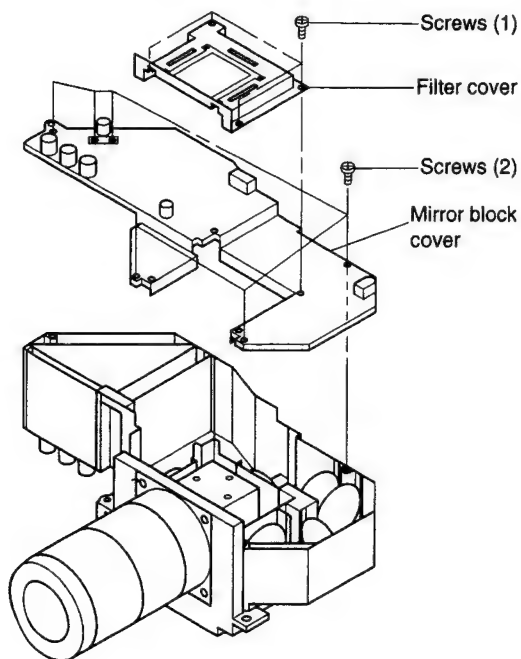


Fig. 3-2-2

3-2-3. LCD Block, LCD Plate and LCD Panel

Note:

- Do not touch the LCD panels with your bare fingers. Wear white cotton gloves when working with the panels.
1. Remove all cables connected to connectors on PC board and LCD panel and drive PC board.
 2. Peel off tape covering openings around FPC section of each LCD on filter cover.
 3. Remove 4 screws (1) and remove filter cover.
 4. Remove 3 screws (2) (always use a screw driver with a strong magnet) and remove LCD plate with LCD to be replaced from LCD block. When replacing three LCDs at the same time, first remove green LCD plate from the LCD block.
 5. Remove 3 screws (3) and remove LCD panel from LCD plate.

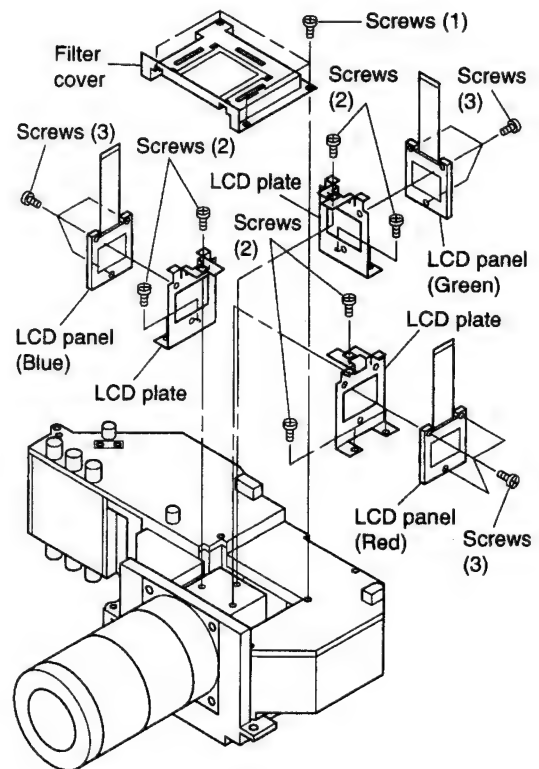


Fig. 3-2-3

< How to mount a new LCD >

1. When mounting a red LCD, mount it on the red LCD plate (No.23796019) or when mounting a blue LCD, mount it on the blue LCD plate (No.23796018) so that the FPC section faces upward and main unit side faces downward.
2. When mounting a green LCD, mount it on the LCD plate used so far. In this case, prepare the green LCD mounting jig (No.23796021), and position the LCD plate so that its two holes (1) matches two protruded parts on the jig. Then place the green LCD on it in the same direction as the red and blue LCDs by tightening screws (3 holes (2) on the LCD plate).

Note:

- Be always sure to attach the black shielding sheet on the LCD.

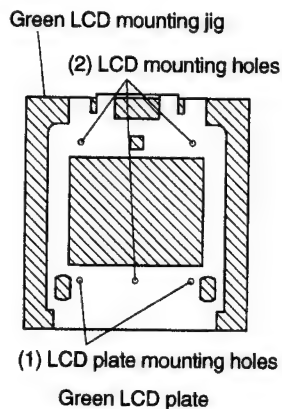


Fig. 3-2-4

3. Mount the LCD plate with a new LCD mounted at the bottom side of the LCD block (can be mounted only in one direction) and tighten the screws. Do not tighten the screws completely. Tighten the screws temporarily so that the LCD can move for later pixel matching adjustment of the LCDs.

Note:

- Do not mount the filter cover to allow the LCD adjustment.

< Adjustment of LCD >

If the red and blue LCD panels need to be adjusted, follow the procedures in the item "Red/Blue LCD adjustment". However, if the green LCD panel needs to be adjusted, follow the procedures in the item "Green LCD adjustment". After the green LCD panel adjustment is carried out, it is necessary to replace or adjust the red and blue LCD panels as described in the item "Red/Blue LCD adjustment".

< Service jig >

- Focus adjust jig : 23974761



Fig. 3-2-5

< Drive PC board remounting >

Remount the drive PC board under the filter cover not installed. Connect cables removed from connectors on the drive PC board and the LCD panel as they were connected. (If a signal generator which can not generate a white raster signal is not available, do not connect the LCD panel.)

< Setup >

1. Make a wall chart on white fiber board as illustrated in Fig. 3-2-6.

Note:

- Only use a stiff material to prevent focus errors.

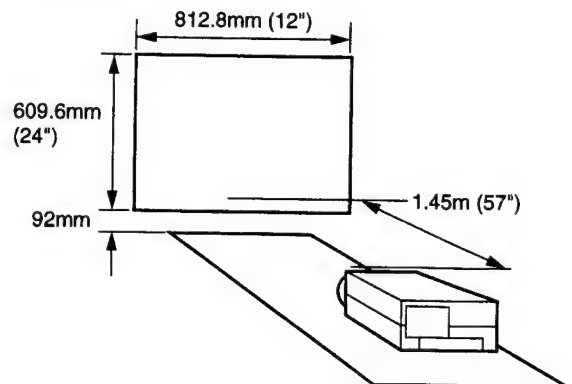


Fig. 3-2-6

2. Retract the foot adjusters so the unit sits flat.
3. Place the LCD Projector on a table so that the front edge of the lens is 1.45m from the wall. (Refer to Fig. 3-2-6)
4. Set the zoom ring to the maximum wide setting.
5. Adjust the focus ring to the center of its range.

6. Feed a white raster signal through RGB connectors and turn on the power of the projector. (If a signal generator which provides a white raster signal is not available, turn on the power without connecting the LCD panel.)
7. If all three LCD panels need to be replaced, refer to the "Green LCD adjustment".
8. Adjust the focus ring and the raster focus of the LCD which has not been replaced. If the green LCD is not replaced, adjust the green raster. If the green LCD is replaced, adjust the red raster, and if the red LCD is replaced, adjust the blue raster.
9. Attach the wall chart to the wall so the bottom line of the square lines up with the bottom of the raster. Also, center the chart horizontally with the raster.
10. Adjust the zoom ring and make sure the bottom of the raster remains on the bottom line. Return the zoom ring to the maximum wide setting.
11. Hereafter, do not move the setting position and the focus ring.

< Red/Blue LCD adjustment >

1. Confirm connection of the LCD panel (if not connected, connect the LCD to the connector of the PC board.)
2. Turn the projector on.
3. Input the cross hatch pattern from RGB connectors. Only input R signal when adjusting the red panel focus, and only input B signal when adjusting the blue panel focus.
4. Prepare two focus adjustment jigs. Insert them onto two holes on bottom of the LCD plate, and adjust the LCD plate back and forth until the best focus is obtained in considering left and right balance of the projection screen.

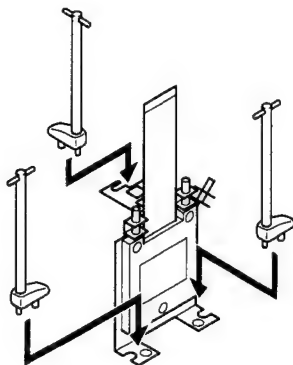


Fig. 3-2-7

5. If the focus or raster geometry is changed, when tightening the screws holding the LCD mount, loosen the screws slightly and readjust.
6. Prepare one focus adjustment jig and insert it onto the one hole on top of the LCD plate, and adjust the LCD plate back and forth until the best focus is obtained in considering upper and lower balance of the projection screen. (Refer to Fig. 3-2-7.)
7. If the focus or raster geometry is changed, when tightening the screws holding the LCD mount, loosen the screws slightly and readjust.
8. Input the cross hatch pattern of G signal.
9. Adjust the cross hatch pattern up & down (Refer to Fig. 3-2-8) and left & right (Refer to Fig. 3-2-9) with the three adjusting screws (hex screw driver (1.0 mm) available on the market) until it is aligned with the green cross hatch pattern.

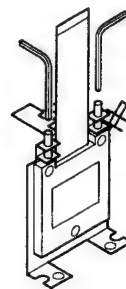


Fig. 3-2-8

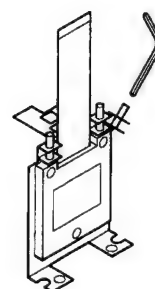


Fig. 3-2-9

10. Turn off the power, and remove the FPC section of the LCD from the connector of the drive PC board.

11. Fill a quick dry adhesive at joint of the LCD mount. In this case, sufficient care will be necessary so that the adhesive does not stick to the LCD panel surface or any other parts.

Note:

- Use the adhesive available on the market as an epoxy type two liquid mixture of equal amount.

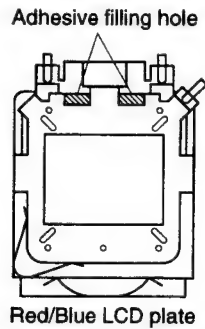


Fig. 3-2-10

12. Leave the LCD block until the adhesive is hardened for a required time. In this case, place a thin paper on the LCD block to prevent dusts from entering.
13. When the adhesive is hardened, connect the FPC of the LCD to the connector of the PC board, and turn on the power. Check to see pixel deviation of the LCD.
14. Check to see dusts of the LCD. If dusts are found, remove them.
15. Turn the power off. Remove all the cables connected to the PC board and LCD panel, and remove the drive PC board.
16. Mount the filter cover removed again. Tighten 4 screws, and close openings around the FPC section with tape.
17. Mount the drive PC board again. Connect cables disconnected from the drive PC board and the LCD panel as they were connected.
18. Turn on the power and check operations.

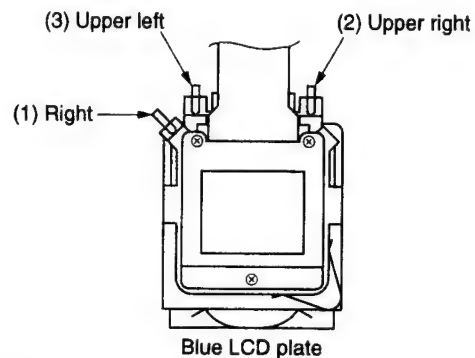
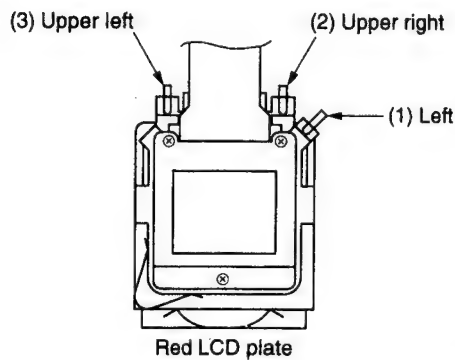


Fig. 3-2-11

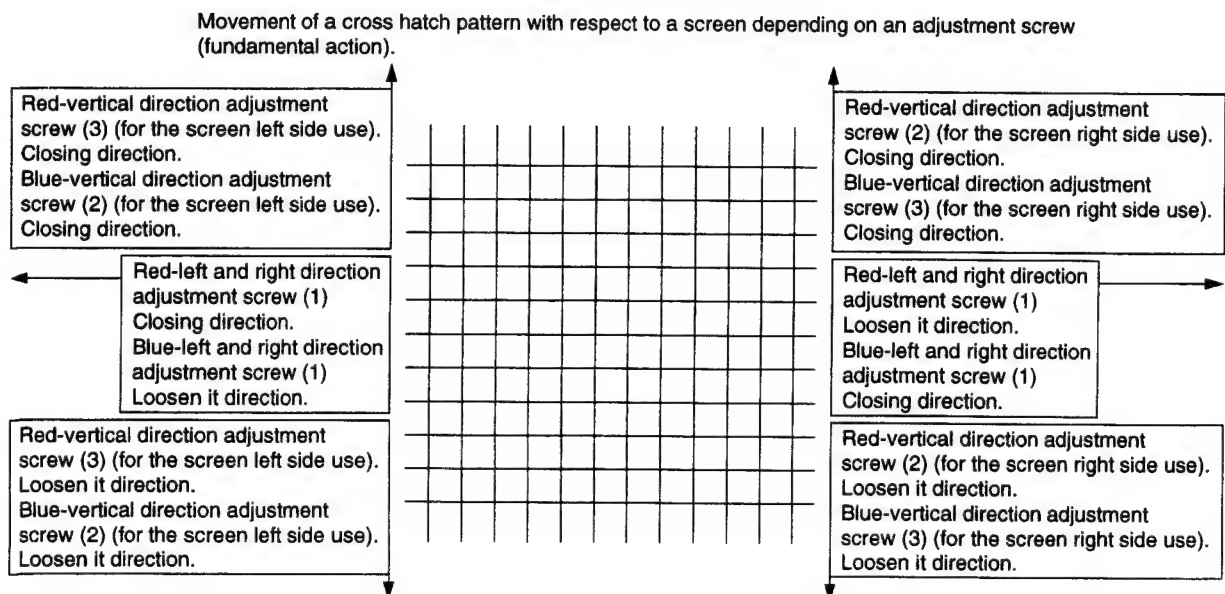


Fig. 3-2-12

< Green LCD adjustment >

1. Confirm connection of the LCD panel (if not connected, connect the LCD to the connector of the PC board.)
2. Turn the projector on.
3. Input the cross hatch pattern from the RGB connectors. Adjust the green color only.
4. Prepare two focus adjustment jigs. Insert them onto two holes on bottom of the LCD plate, and adjust the LCD plate back and forth until the best focus is obtained in considering left and right balance of the projection screen. (Refer to Fig.3-2-7.)
5. If the focus or raster geometry is changed, when tightening the screws holding the LCD mount, loosen the screws slightly and readjust.
6. Prepare one focus adjustment jig and insert it onto the upper hole of the LCD plate, and adjust the LCD plate back and forth until the best focus is obtained in considering upper and lower balance of the projection screen. (Refer to Fig.3-2-7.)
7. If the focus or raster geometry is changed, when tightening the screws holding the LCD mount, loosen the screws slightly and readjust.
8. When the green LCD is replaced, the pixel matching adjustments for the red and blue panels will be necessary in many cases. (If the pixel matching is obtained in above adjustment, it is not necessary.) Accordingly, turn off the power. Remove the FPC section of the red and blue LCDs from the PC board connectors, and remove the red and blue LCD plate from the LCD block.
9. Remove the red and blue LCD from the LCD plate and mount them on new LCD plates.
10. Mount the new red and blue LCD plates on the LCD block.
11. Perform the adjustment steps (1) – (9) described under “Red/Blue LCD Adjustment” for each red and blue LCD.
12. After completion of the red and blue LCD adjustments, perform the steps (10) – (18) described under “Red/Blue LCD Adjustment”.

3-3. Document Camera Section (TLP511U/E)

3-3-1. Camera Section Cover

1. Remove 5 screws (1) and remove camera section cover.

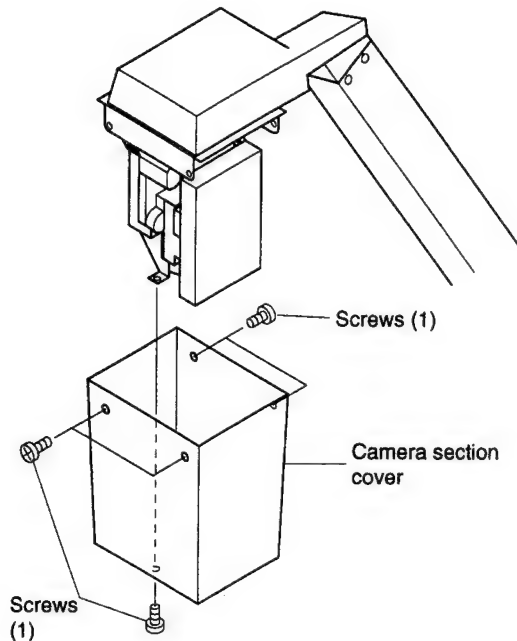


Fig. 3-3-1

3-3-2. Camera Video PC Board and Camera Assembly

1. Remove camera section cover. (Refer to Fig. 3-3-1.)
2. Remove 3 screws (1). (Refer to Fig. 3-3-2.)
3. Remove 1 connector (2) and remove camera assembly.
4. Remove 1 connector (3).
5. Remove 2 screws (4) and 2 screws (5), and camera assembly can be removed from camera video PC board.

Note:

- When 2 screws (4) are removed, stay (6) positioned under CCD can also be removed, so care will be necessary. (Refer to Fig. 3-3-3.)

6. Remove rubber packing (7) and filter (8) from camera assembly.

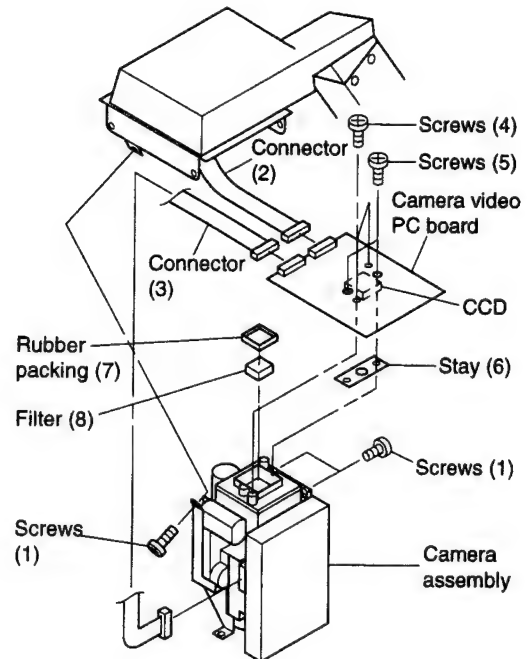


Fig. 3-3-2

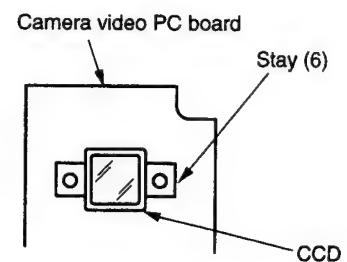


Fig. 3-3-3

3-3-3. FL lamp

1. Remove FL lamp cover and FL lamp unit.
2. Remove 2 screws (1) and FL lamp.
3. Remove 4 screws (2) and remove lower FL lamp cover.

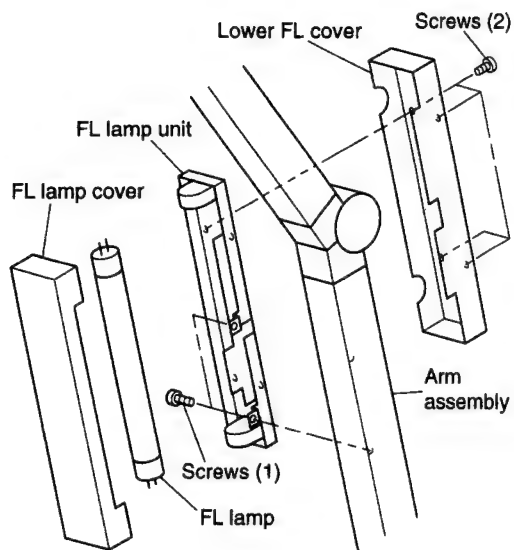


Fig. 3-3-4

3-3-4. Arm Assembly

1. Remove document camera. (Refer to Fig. 3-1-1.)
2. Remove 2 connectors (1).
3. Remove 2 screws (2) securing inverter PC board.
4. Remove 6 screws (3) securing base cover and 3 screws (4) securing arm assembly, remove base plate, and arm assembly.

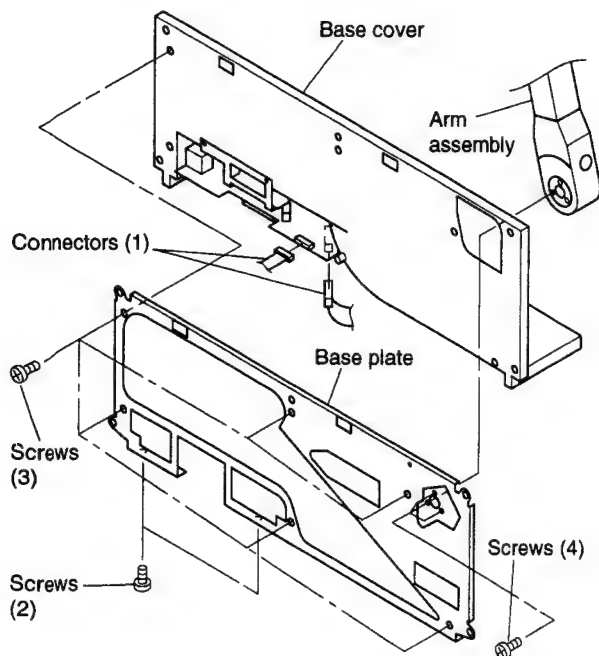


Fig. 3-3-5

3-3-5. Switch PC Board and Inverter PC Board

1. Remove document camera. (Refer to Fig. 3-1-1.)
2. Remove arm assembly. (Refer to Fig. 3-3-5.)
3. Remove 1 screw (1) and pull out inverter PC board from base cover. Remove 1 connector (2) and remove inverter PC board.
4. Remove 3 screws (3) and remove switch PC board.

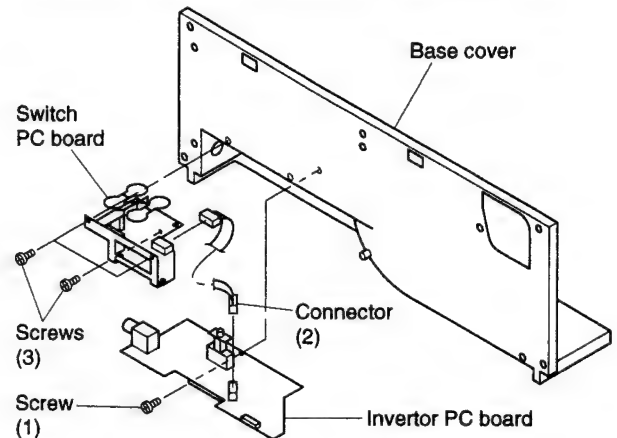


Fig. 3-3-6

3-3-6. Arm Position Detection Switch

1. Remove document camera. (Refer to Fig. 3-1-1.)
2. Remove arm assembly. (Refer to Fig. 3-3-5.)
3. Remove 3 screws (1) and remove arm cover.
4. Remove 2 screws (2) and 2 screws (3), and remove metal bracket (4).
5. Remove 2 screws (5) and remove arm release lever assembly.
6. Remove 1 screw (6) and remove arm position detection switch.

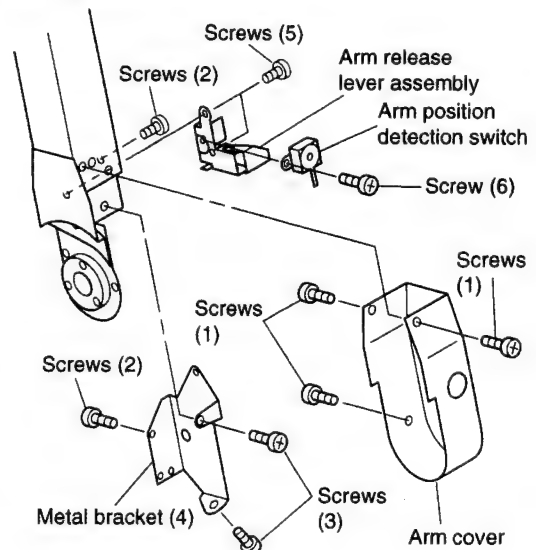


Fig. 3-3-7

4. ELECTRICAL ADJUSTMENT

< Test Equipments and Test Jigs >

- Oscilloscope
- Digital voltmeter
- Adjustment software TLP511.EXE

< Input Signal List (for use of ROM:TLP511.EXE) >

- RGB signals (pedestal level)
- RGB signals (gray scale)
- RGB signals (50% APL)
- Video signal (gray scale)
- Common voltage adjustment signal (XGA)

< Connection and Setting of Personal Computer >

(1) Connection of personal computer

- 1) Connect a computer as shown in Fig. 4-0-1, and then perform the adjustment using the adjustment software TLP511.EXE. (When using a drive C, type C: \TLP511.EXE and press enter key.)

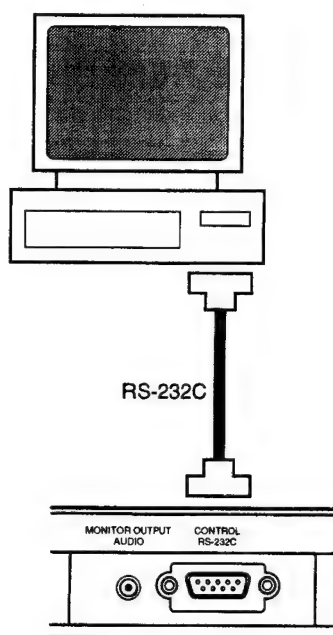


Fig. 4-0-1

(2) Default status setting

- 1) Connect computer and boot adjustment software.
- 2) Set contrast & brightness at the default.
(Refer to owner's manual)

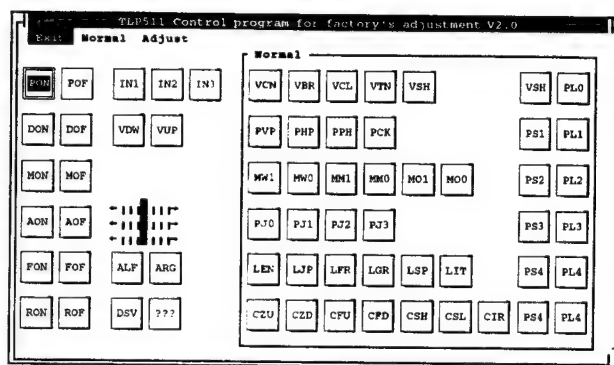


Fig. 4-0-2 Display of computer monitor
(Normal menu)

(3) Adjustment method

- 1) Adjustment is carried out by using Adjust menu on the computer monitor.

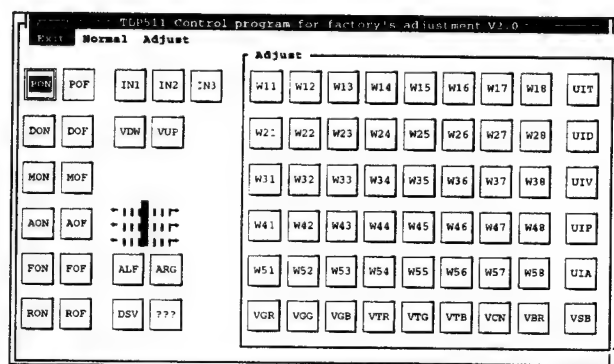


Fig. 4-0-3 Display of computer monitor (Adjust menu)

- 2) ☐ stands for an Adjust menu key.

After clicked ☐ shown in adjustment items, click ☐ , ☐ alternately to adjust to a specified value.

- 3) Before proceeding to each adjustment click in ☐ Adjust menu to set RGB input. When making "1-3. Video signal input adjustment" click ☐ to set video input.

< Adjustment Locations and Adjustment Items >

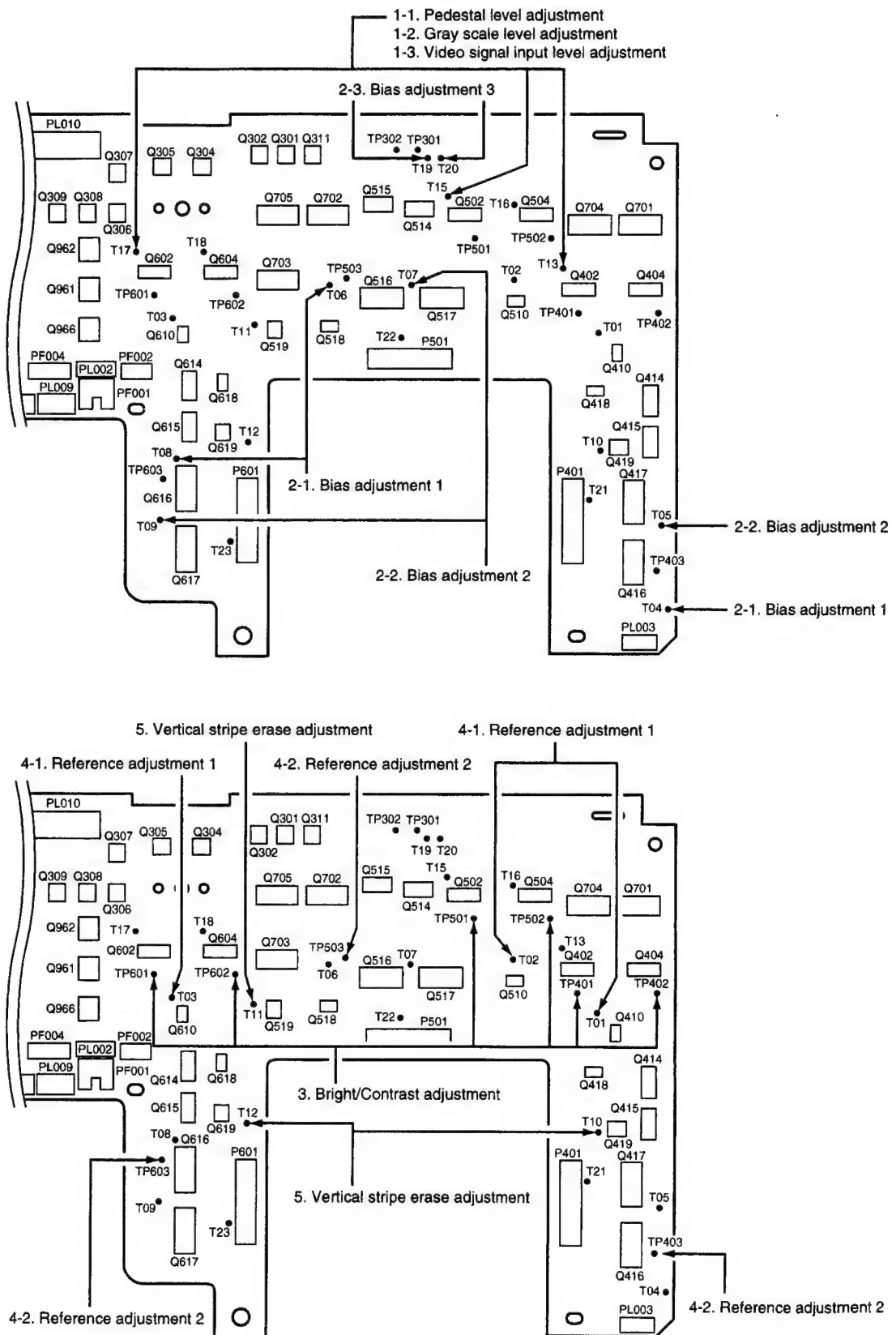




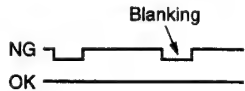



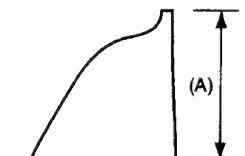




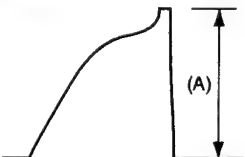






















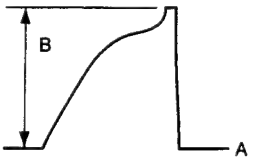
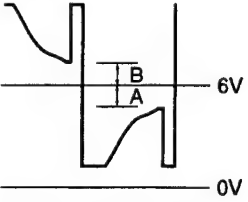
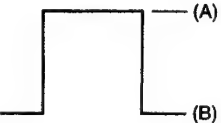


Fig. 4-0-4 Drive PC board (Top side)

Table 4-1-1

Adjust Items	Input Signal	Test Equipment	Test Point	Adjust Key	Adjust Value	Note
1. Input level adjustment						
1-1. Pedestal level adjustment	RGB signals (pedestal level)	Oscilloscope	T13 (R) T15 (G) T17 (B)	  	• See the illustration right.	• Select  and adjust until signal shows flat. 
1-2. Gray scale level adjustment	RGB signals (gray scale)	Oscilloscope	T13 (R) T15 (G) T17 (B)	  	A = $1.75V \pm 50 \text{ mV}$ A = $1.75V \pm 50 \text{ mV}$ A = $1.75V \pm 50 \text{ mV}$	
1-3. Video signal input level adjustment	Video signal (gray scale)	Oscilloscope	T13 (R) T15 (G) T17 (B)	  	A = $1.75V \pm 50 \text{ mV}$ A = $1.6V \pm 50 \text{ mV}$ A = $1.75V \pm 50 \text{ mV}$	• Click  to set video input mode. 
2. Bias adjustment						
2-1. Bias adjustment 1	RGB signals (gray scale)	Digital voltmeter	T04 (R) T06 (G) T08 (B)	  	$6V \pm 20 \text{ mV}$ $6V \pm 20 \text{ mV}$ $6V \pm 20 \text{ mV}$	
2-2. Bias adjustment 2	RGB signals (gray scale)	Digital voltmeter	T05 (R) T07 (G) T09 (B)	  	$6V \pm 20 \text{ mV}$ $6V \pm 20 \text{ mV}$ $6V \pm 20 \text{ mV}$	• Adjustment value for bias adjustment 1: $\pm 10 \text{ mV}$
2-3. Bias adjustment 3	RGB signals (gray scale)	Digital voltmeter	T20 (G) T19 (G)	 	$6V \pm 20 \text{ mV}$ $6V \pm 20 \text{ mV}$	• Click  on Normal menu to set forward scan mode and then start the adjustment. Next click  to set reverse scan mode and perform adjustment. • Adjustment value for bias adjustment 1: $\pm 10 \text{ mV}$
3. Bright/Contrast adjustment	RGB signals (gray scale)	Oscilloscope	TP401 (R) TP401 (R) TP402 (R) TP402 (R) TP501 (G) TP501 (G) TP502 (G) TP502 (G) TP601 (B) TP601 (B) TP602 (B) TP602 (B)	 (bright)  (contrast)  (bright)  (contrast)  (bright)  (contrast)  (bright)  (contrast)  (bright)  (contrast)  (contrast)  (bright)	A = $2V \pm 50 \text{ mV}$ B = $3V \pm 50 \text{ mV}$ TP401 adjustment value $\pm 30 \text{ mV}$ TP401 adjustment value $\pm 30 \text{ mV}$ A = $2V \pm 50 \text{ mV}$ B = $2.9V \pm 50 \text{ mV}$ TP501 adjustment value $\pm 30 \text{ mV}$ TP501 adjustment value $\pm 30 \text{ mV}$ A = $2V \pm 50 \text{ mV}$ B = $2.9V \pm 50 \text{ mV}$ TP601 adjustment value $\pm 30 \text{ mV}$ TP601 adjustment value $\pm 30 \text{ mV}$	

Adjust Items	Input Signal	Test Equipment	Test Point	Adjust Key	Adjust Value	Note
4. Reference adjustment						
4-1. Reference adjustment 1	RGB signals (gray scale)	Digital voltmeter	T01 (R) T02 (G) T03 (B)	W18 W28 W38	6V (coarse adjustment) 6V (coarse adjustment) 6V (coarse adjustment)	
4-2. Reference adjustment 2	RGB signals (gray scale)	Oscilloscope	TP403 (R) TP403 (R) TP503 (G) TP503 (G) TP603 (B) TP603 (B)	W17 W18 W27 W28 W37 W38	A B A B A B	<ul style="list-style-type: none"> Adjust for A = B as shown in illustration below. (tolerance ± 20 mV) 
5. Vertical stripe erase adjustment	RGB signals (gray scale)	Oscilloscope	T10 (R) T10 (R) T11 (G) T11 (G) T12 (B) T12 (B)	W46 W44 W45 W48 W51 W47	A = $6.5V \pm 50$ mV B = $1.5V \pm 50$ mV A = $5.5V \pm 50$ mV B = $1.5V \pm 50$ mV A = $6.5V \pm 50$ mV B = $1.5V \pm 50$ mV	
6. Bias adjustment	RGB signals (50% APL)	—	—	W52	Less apparent for vertical stripe	<ul style="list-style-type: none"> Click [PJ0] on Normal menu and set forward scan mode on, and then make adjustment.
7. Common voltage adjustment	Common voltage adjustment signal (XGA)	—	—	W41 W42 W43	Minimum flicker	<ul style="list-style-type: none"> In ceiling installation: Set V reverse mode on (refer to owner's manual) and then make adjustment in the sameway.

4-1. Camera Section Adjustment (TLP511U/E)

< Before Adjustment >

In the most cases, this adjustment will be made after replacement of electrical parts. If a failure occurs in the electrical circuit, always locate the failure by using required instruments, and perform the repairing, replacement and the adjustment. Do not tamper the adjustment volumes without locating the failure. Some failure may not need readjustment, so only perform the adjustments required in practical servicing.

< Equipment Required >

1. Personal computer
IBM PC/AT or equivalent (with Windows 95 supported)
2. Color video monitor
3. Illumination
Halogen lamp (500W x 2)
4. Toshiba camera adjustment chart
Color bar chart (PN70909322)
5. Waveform monitor
6. Vector scope
7. Adjustment screwdriver
8. Color temperature conversion filter (C14)
9. Adjustment cable (PN70909447)
10. RS-232C cable (straight type)
11. Adjustment software

Note:

- If illumination unevenness exists on the adjustment chart, correct adjustment can not be made. So arrange the illumination equipments to obtain the flat illumination.
- Always use the adjustment chart free from dirty.
- The unit employs PAL system. So use the above equipments for PAL system.

< Initial Setting >

1. The adjustments for the camera section are carried out with the camera section removed from the unit.

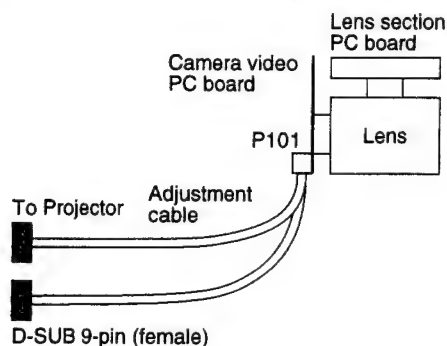


Fig. 4-1-1

2. Set the chart facing to the camera and adjust the light position to obtain the even light of the illumination.

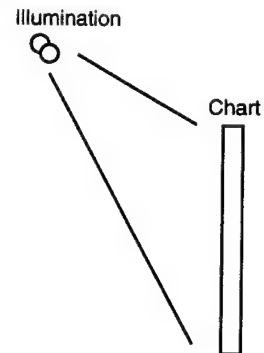


Fig. 4-1-2

3. Connect the connector (PM002) on the projector and P101 with the adjustment cable, and connect the camera output jack to the video monitor.
4. Connect the D-SUB9 pin connector of adjustment cable and COM1 port of the personal computer with a RS-232C cable.

Note:

- After completion of the setting above, turn on the powers of all the equipments and leave then for 5 minute for warming up.

< Cable Connection Diagram for Adjustment >

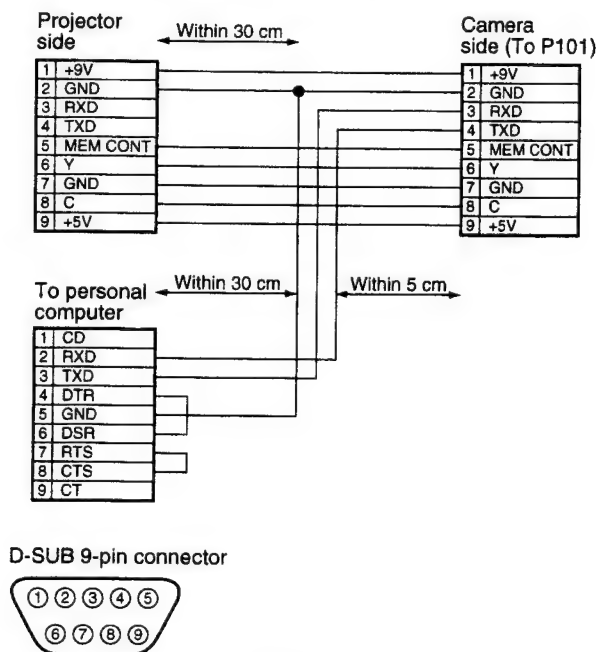


Fig. 4-1-3

< Service Adjustment Software Boot Up >

1. Start the personal computer.
2. Check the camera power is on.
3. Boot up the adjustment software (K48ADJ).
4. Check a screen menu obtained on the computer monitor.
5. Each adjustment is carried out using the adjustment software.
The words with rectangle in the sentence show the buttons on the display of a personal computer.

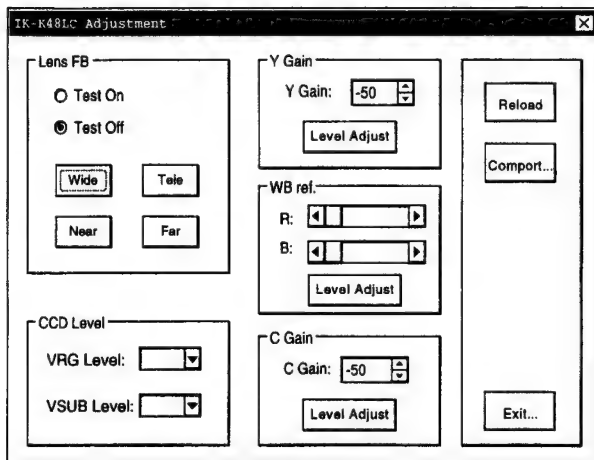


Fig. 4-1-4

Note:

If an error message will appear, check following items.

- Camera power is on.
- Camera and personal computer (COM1 port) is connected.

< Flow Chart >

The procedures are given in order to perform entire adjustments. Accordingly, some items may not be required depending on a type of failure or adjustment. In such a case, perform only the required items. However, always perform the initial setting.

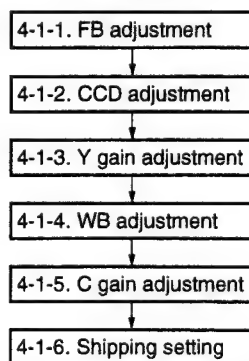


Fig. 4-1-5

< Adjustment Locations and Adjustment Items >

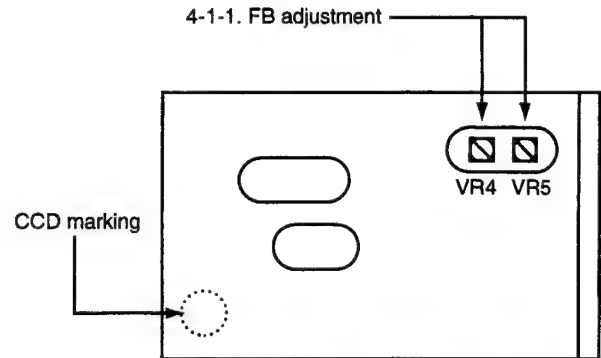


Fig. 4-1-6 Lens section PC Board (Top side)

4-1-1. FB Adjustment

Note:

This adjustment should be made only when the lens is replaced or removed from the camera PC board.

- Test point : Video output
- Test equipment : TV monitor, waveform monitor
- Adjusting point : VR4, VR5 (Lens section PC board)
- Adjusting value : Refer to below

1. Click Test On button. In this case, check the lens is set to the Tele side fully.
2. Shoot an object in distance of more than 10m and adjust the focus with VR5 on the lens section PCB.
3. Click Test Off button, shoot the object in distance of more than 10m, press Wide button until the lens reaches the wide end, and adjust the focus with VR4.
4. Shoot the color bar chart in distance of 30 ± 1 cm, move the lens to the Tele end with the Tele button, and adjust the focus with the Near button/ Far button.
5. Keep to press Wide button to set the lens to the Wide end and check the focus is not deviated. If the focus is deviated, perform the adjustment from step 2 again.

Note:

- Test point : —
- Test equipment : —
- Adjusting point : —
- Adjusting value : Refer to below.

- ### 4-1-3. Y Gain Adjustment

- Test point : Video output
- Test equipment : TV monitor, waveform monitor
- Adjusting point : —
- Adjusting value : $80 \pm 20\%$

-

Fig. 4-1-7

- Test point : Video output
- Test equipment : TV monitor, vector scope, waveform monitor
- Adjusting point : —
- Adjusting value : Refer to below.

-

Fig. 4-1-8

- Test point : Video output
- Test equipment : TV monitor, vector scope, waveform monitor
- Adjusting point : —
- Adjusting value : Refer to below.

1. Shoot the color bar chart in full size of the screen. In this case, make sure the white section fully occupies the left side on the screen.
2. Insert the color temperature conversion filter C14.

3. Click the **Level Adjust** button on the C gain group, and check the luminance level of the white section is automatically set to $100 \pm 10\%$. If not, move the chart position so that the white section is located at left side of the screen and then click the **Level Adjust** button again.
4. While observing the vector scope, adjust C Gain **▲** **▼** buttons until the R spot is located at center of **+**.

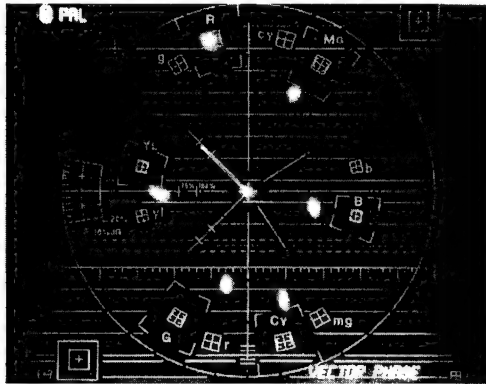


Fig. 4-1-9

4-1-6. Camera Shipping Adjustment

- Test point : —
 - Test equipment : —
 - Adjusting point : —
 - Adjusting value : —
1. Click the **Exit...** button, and a dialogue box will appear on the screen. This completes the camera shipping adjustments.

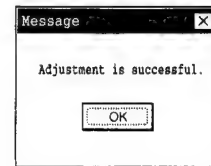


Fig. 4-1-10

Note:

If an error message will appear, check following items.

- Camera power is on.
- Camera and personal computer (COM1 port) are connected.

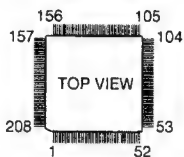
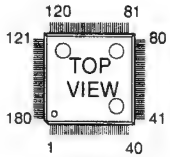
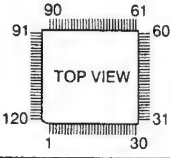
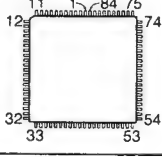
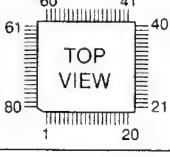
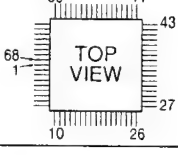
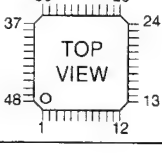
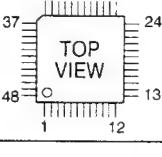
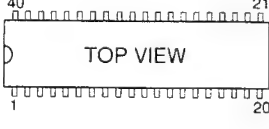
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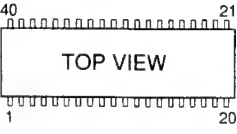
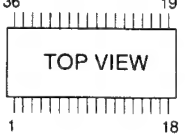
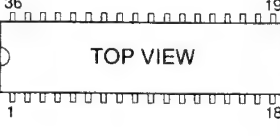

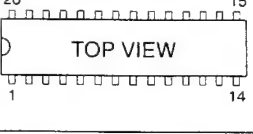
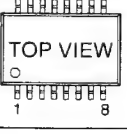
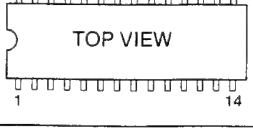
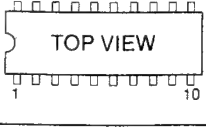
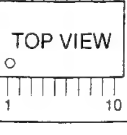
SECTION 2


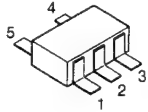

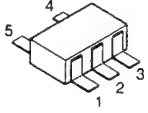

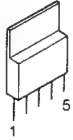
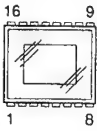
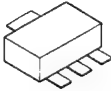

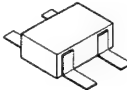

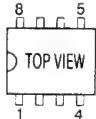
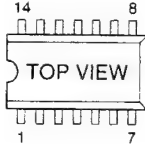
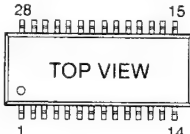

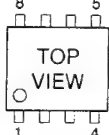
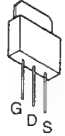
SERVICING DIAGRAMS

1. PART CONFIGURATION AND THEIR SYMBOLS

1.ICs

NAME	SHAPE
TC203E2651AF	
SYG-TC160G	
HD49811TFA	
EPM7160TLP51	
6473337PROG	
EPM7064TLP51	
CXA3106Q	
HD49322BF CXA1855Q MB40950PFQ CXA3026Q	
MB814265-60	

NAME	SHAPE
CXA2504N	
M52348FP	
M52320SP	
TDA9141	
TDA4780	
MC74HC165F MM1024AF LM1201M(TP) M62320FP MAX497CSE	
TC9090AN	
TC74HCT240AF	
CXD1267AN	

NAME	SHAPE	NAME	SHAPE
UPD4721GS M52347FP M62399FP		TC7S04F TC7S04FU TC7S08F TC7S14F RN5VD27A	
MC74HC541FEL		TC7S32F	
TDA4672		PQ20VZ1U LM2991SX	
ICX059AK-6		2SC2873-Y(C) TA78L05F	
CXA1315M TDA4665T		MM1031XMR	
TLC2932IPW		CAT24C16J	
TC74HC125AF MC74HC14AF UPD74HC4066A		CD0016AM	
TDA7056A		2. TRANSISTORS	
MC33078M,AK93C65LV M5222FP,EL2244CS TC4W66F(BRA),AD8072JR TC7W32FU,MAX4121CSA TC7W74FU SN75372PS		PQ05SZ1U	

NAME	SHAPE	NAME	SHAPE
RN1402,RN2404 2SA1586-Y,2SC3356 2SA1162-Y,2SC3931-C 2SC4116-Y,UN5211 2SC2712-Y,UN5111 2SC2712-Y,UN5213		1SS187	
UMZ1		MA111	
XN6213		1SS301	
2SK880-Y		RD12M RD15M-T2BB2 RD5.1M-T1BB2 RD2.4M	
2SC3834		1T363	
3.DIODEs		DTZ8.2B DTZ15C	
MTZJ15B		RD6.2M-T2BB2 RD2.0M-T1BB	
RD10MB2		SPR325MVWMNP	
1SS302			

1-1. Replacing Subminiature "CHIP" Parts

1-1-1. Required Tools:

1. Fine tipped, well insulated soldering "pencil", about 30 Watts.
2. Tweezers.
3. Blower type hair dryer.

1-1-2. Soldering Cautions:

1. Do not apply heat for more than 3s.
2. Avoid using a rubbing stroke when soldering.
3. Discard removed chips; do no reuse them.
4. Supplementary cementing is not required.
5. Use care not to scratch or otherwise damage the chips.

1-1-3. Removal (Resistors, Capacitors, etc.):

1. Melt the solder at one side.

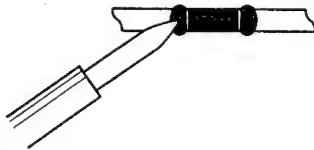


Fig. 1-1-1

2. Grasp the part with tweezers and melt the solder at the other side.

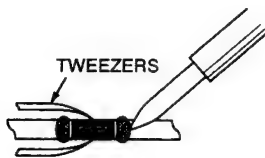


Fig. 1-1-2

3. Remove the part with a twisting motion.

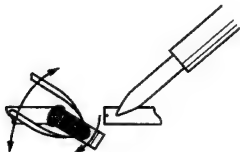


Fig. 1-1-3

1-1-4. Removal (Transistors, Diodes, etc.):

1. Melt the solder of one lead.

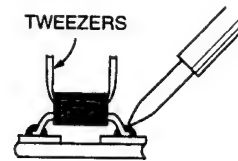


Fig. 1-1-4

2. Lift the side of that lead upward.

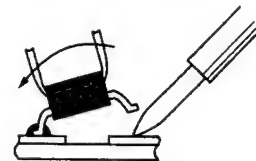


Fig. 1-1-5

3. Simultaneously heat solder the two remaining leads and lift part to remove.

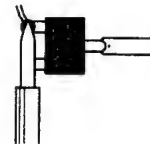


Fig. 1-1-6

1-1-5. Preheating (Except for semiconductors):

Immediately before installing new resistors or capacitors, use a blower type hair dryer and preheat the part for about two min. at approximately 150°C.

1-1-6. Replacement:

1. Presolder the contact points of the circuit pattern.

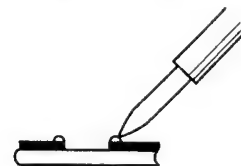


Fig. 1-1-7

2. Press the part downward with tweezers and apply the soldering pencil as indicated in the figure.

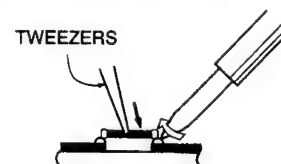


Fig. 1-1-8

1-2. Precautions for Part Replacement

- In the schematic diagram, parts marked \triangle (ex. \triangle F801) are critical part to meet the safety regulations, so always use the parts bearing specified part codes (SN) when replacing them.
- Using the parts other than those specified shall violate the regulations, and may cause troubles such as operation failures, fire etc.

1-3. Solid Resistor Indication

Unit	None Ω k $k\Omega$ M $M\Omega$
Tolerance	None $\pm 5\%$ B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ K $\pm 10\%$ M $\pm 20\%$
Rated Wattage	(1) Chip Parts None 1/16W (2) Other Parts None 1/6W Other than above, described in the Circuit Diagram.
Type	None Carbon film S Solid R Oxide metal film W Metal film W Cement FR Fusible

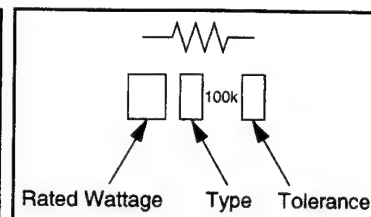


Fig. 1-3-1

1-4. Capacitance Indication

Symbol	$- ^{\pm}$ Electrolytic, Special electrolytic $- ^{\mu P}$ Non polarity electrolytic $- ^{\pm}$ Ceramic, plastic $- ^M$ Film $- ^{\pm}$ Trimmer
Unit	None F μ μF p pF
Rated voltage	None 50V For other than 50V and electrolytic capacitors, described in the Circuit Diagram.
Tolerance	(1) Ceramic, plastic, and film capacitors of which capacitance are more than 10 pF. None $\pm 5\%$ or more B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ (2) Ceramic, plastic, and film capacitors of which capacitance are 10 pF or less. None more than $\pm 5\%$ pF B ± 0.1 pF C ± 0.25 pF (3) Electrolytic, Trimmer Tolerance is not described.
Temperature characteristic (Ceramic capacitor)	None SL For others, temperature characteristics are described. (For capacitors of 0.01 μF and no indications are described as F.)

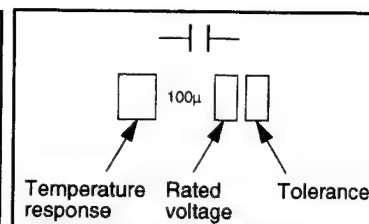


Fig. 1-4-1

1-5. Inductor Indication

Unit	None H μ μH m mH
Tolerance	None ±5% B ±0.1% C ±0.25% D ±0.5% F ±1% G ±2% K ±10% M ±20%
Type	PL Peaking For other, model name is described.

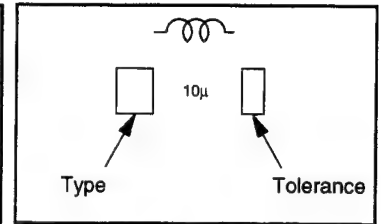


Fig. 1-5-1

1-6. Waveform and Voltage Measurement

- Measurement of waveform and voltage at each section in the color circuits was conducted with sufficient service color bar signal being received and reproduced in normal conditions.
- Waveforms and voltage values for the remaining circuit were measured with a broadcasting signal normally received, so they may vary slightly according to the programs being received. Use them as a measure for servicing.
- All voltage values except the waveforms are expressed in DC and measured by a digital voltmeter.

3. If it is difficult to remove the part, temporarily stop the desoldering job and wait until temperature of the part lowers. Then, repeat steps 1 and 2.
4. Form leads of the replacement part (general part equivalent to the chip part) as shown in the figures and solder place. (Fig. 1-7-2)

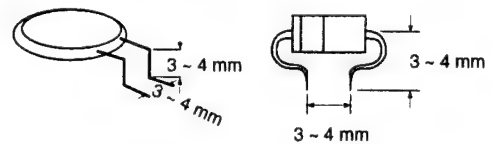


Fig. 1-7-2

1-7. Chip Part Replacement

(Use spare part with wire leads connected.)

1. Hold a Chip part to be removed with tweezers and apply heat to the solder at one end of the part with a soldering iron. (Fig. 1-7-1)

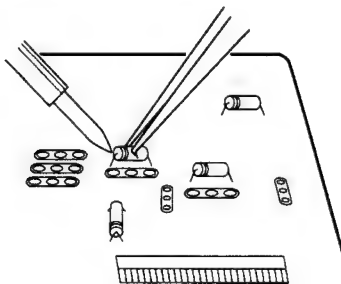


Fig. 1-7-1

2. Apply heat to the solder at the other end of the part and remove it.

The heating time should be as short as possible so the excessive heat is not applied to foil patterns and the PC Board.

5. Mount the replacement part so that it does not touch any other parts. (Fig. 1-7-3)

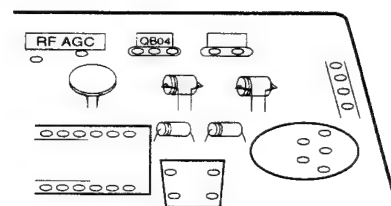


Fig. 1-7-3

2. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

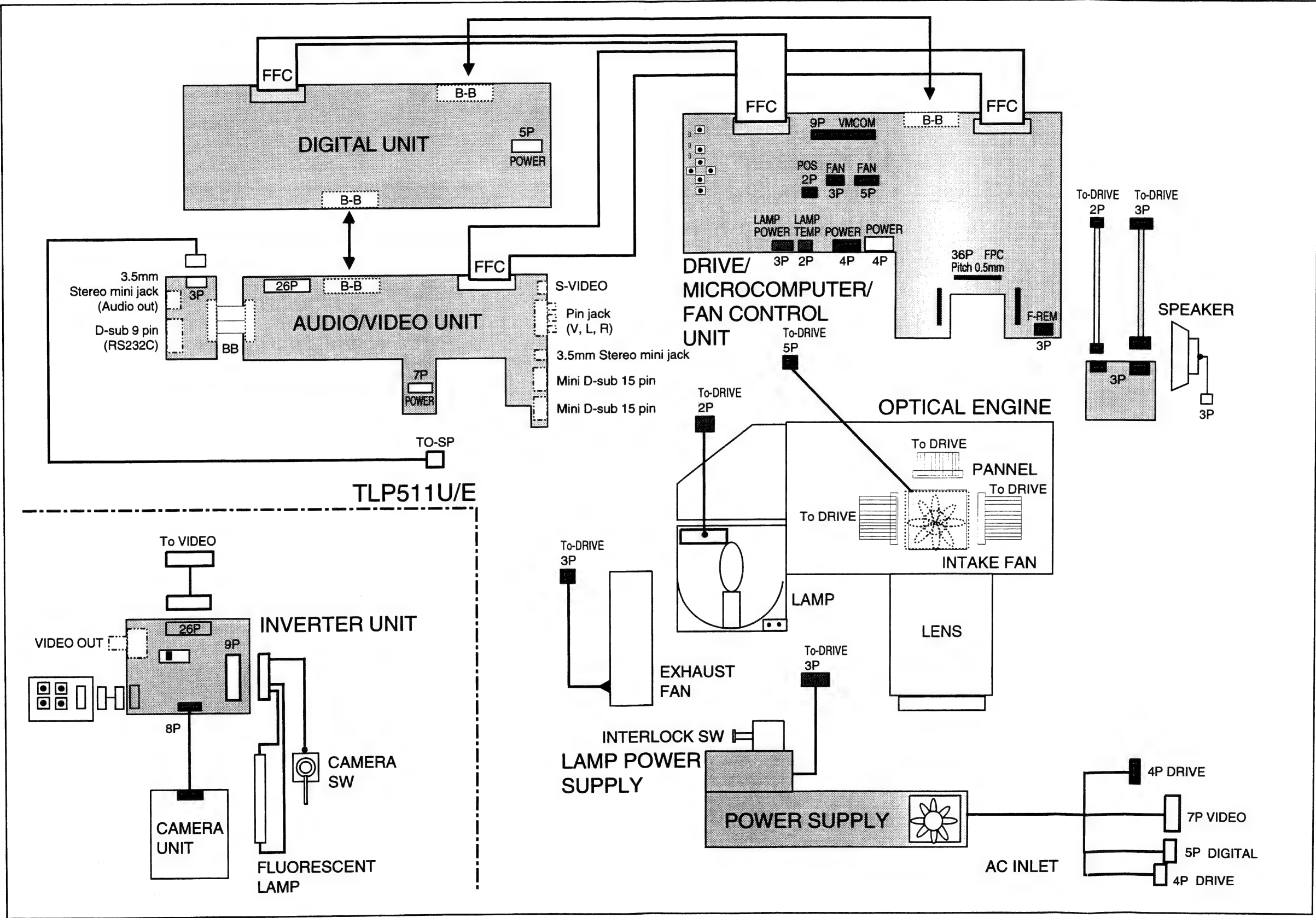


Fig. 2-0-1

3. BLOCK DIAGRAMS

3-1. System Block Diagram

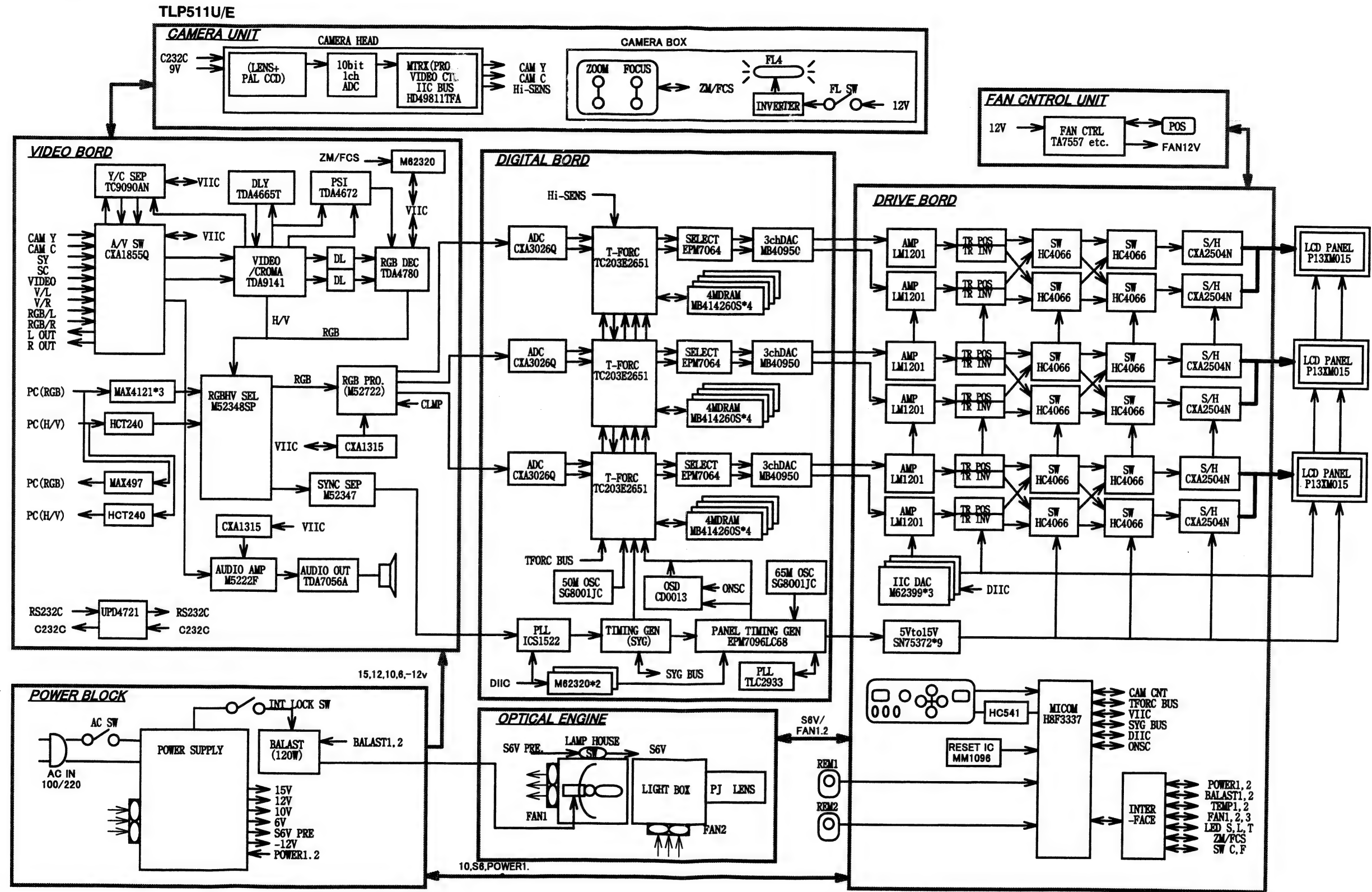
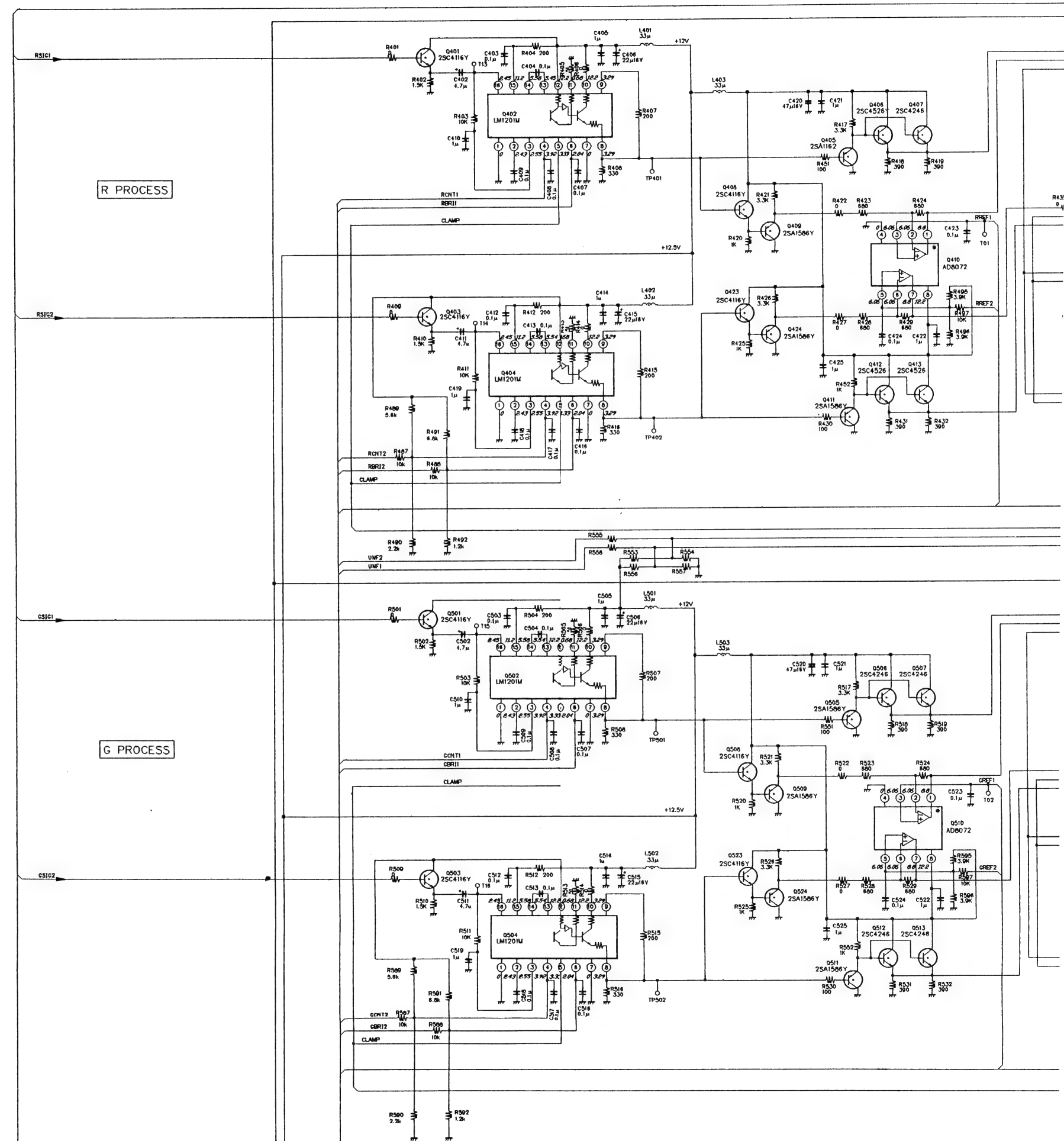
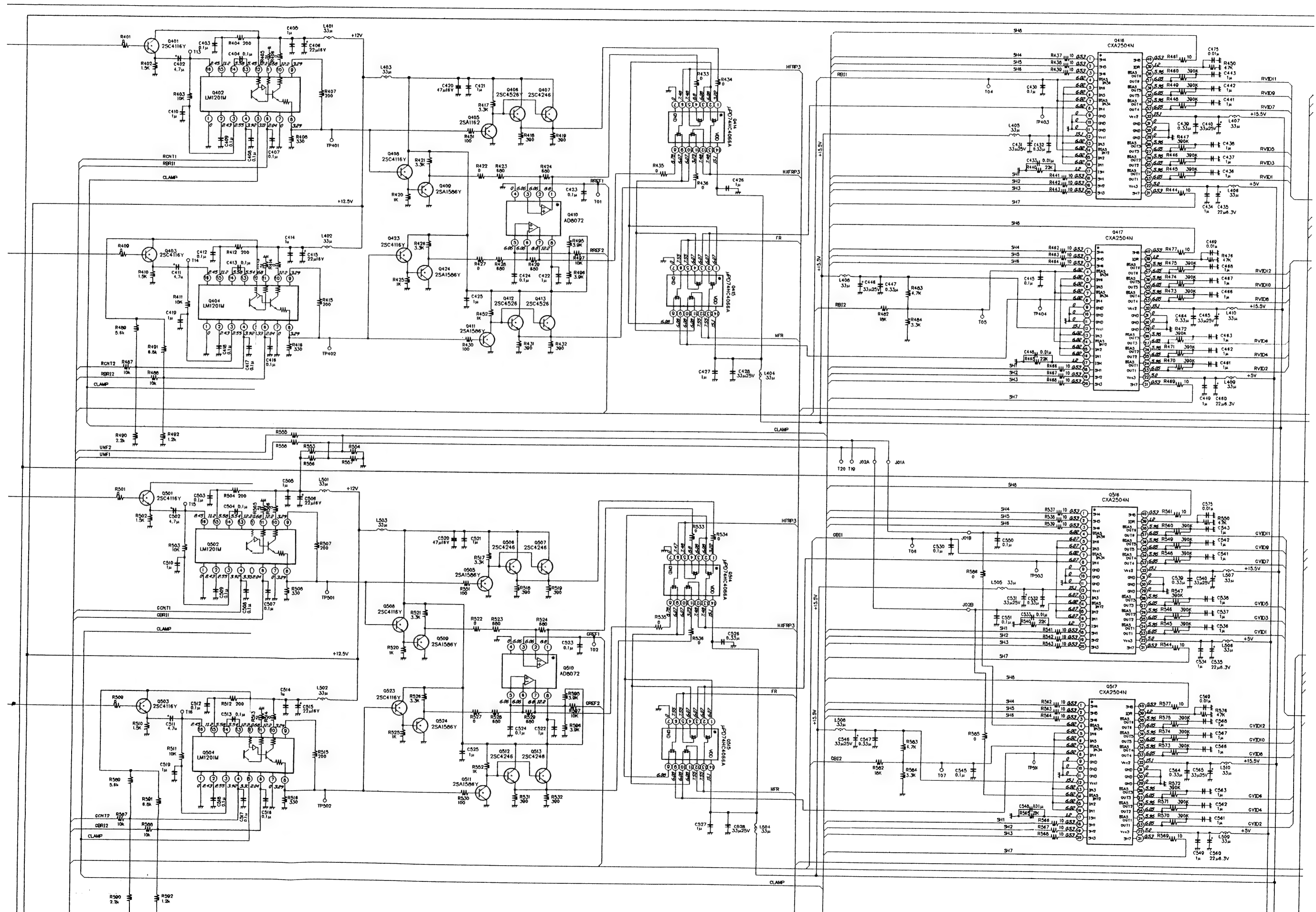
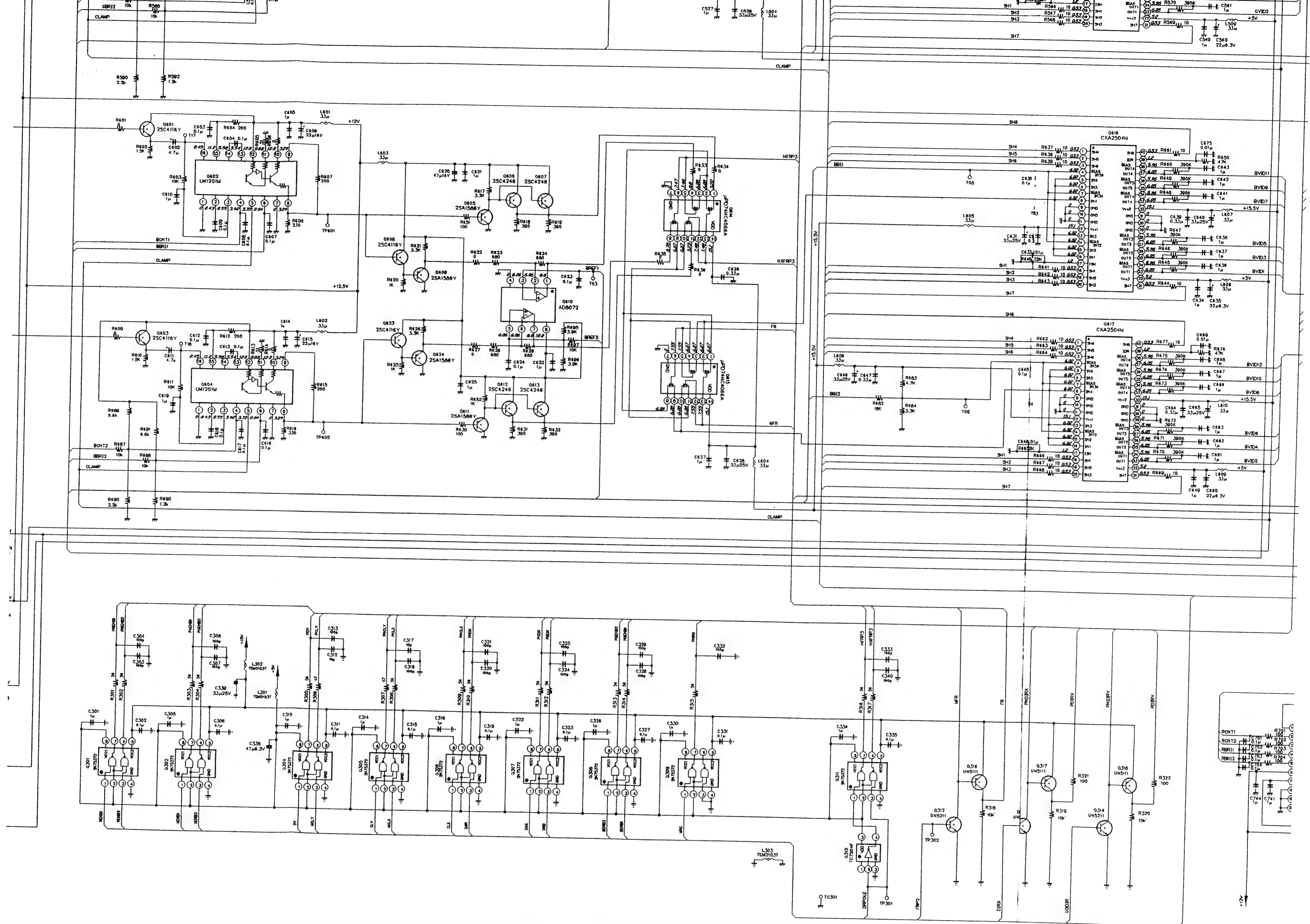


Fig. 3-1-1









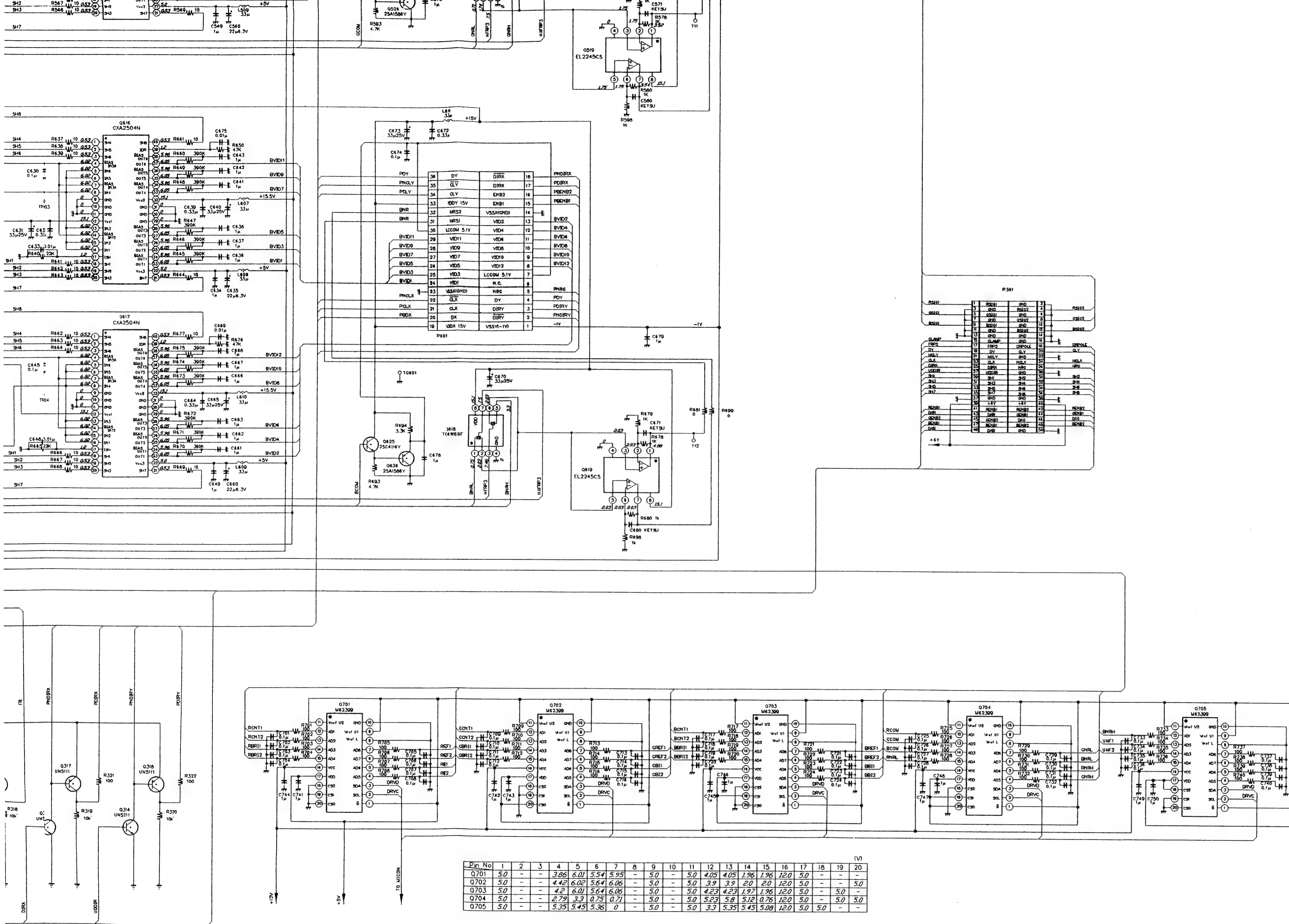
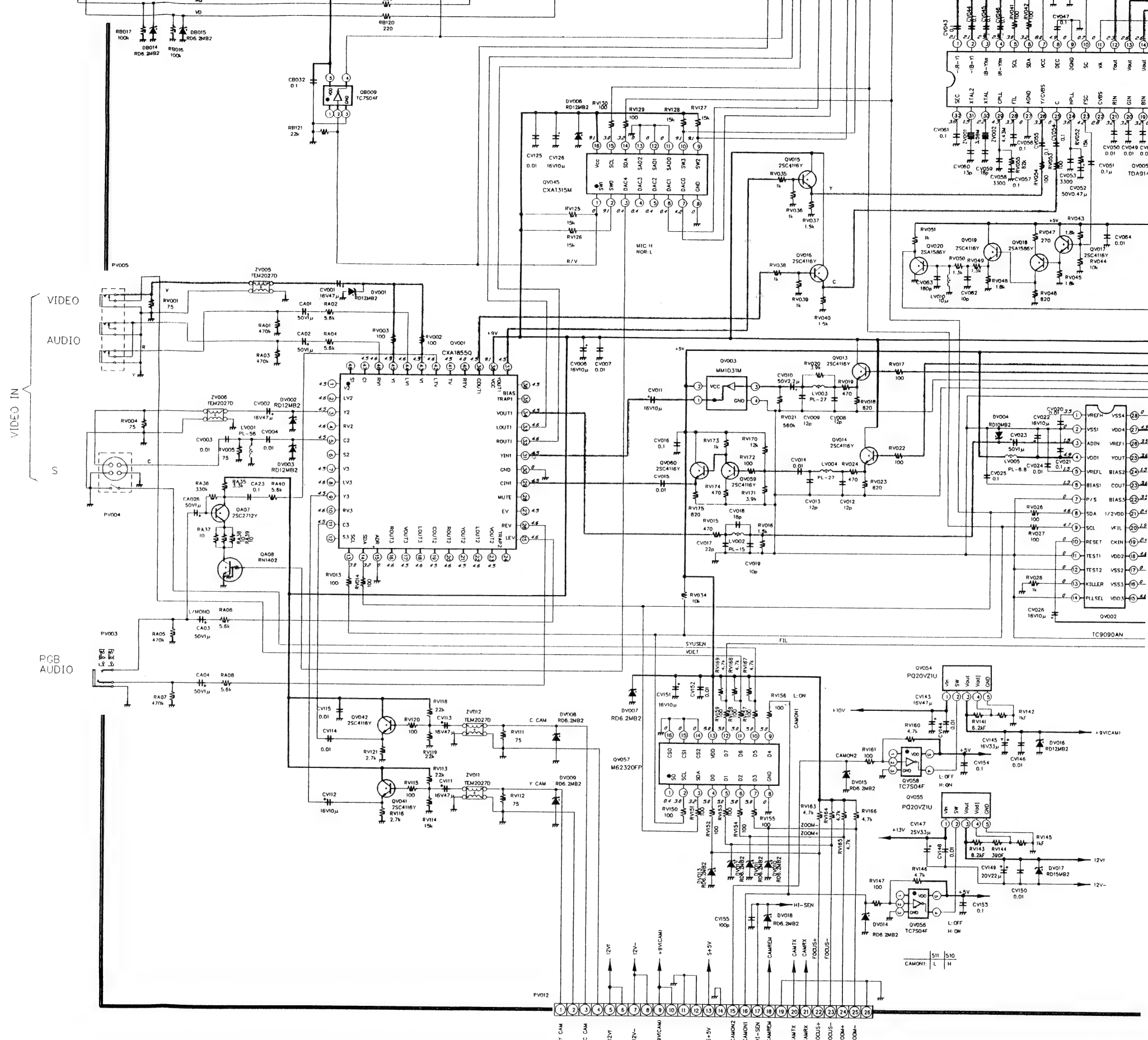
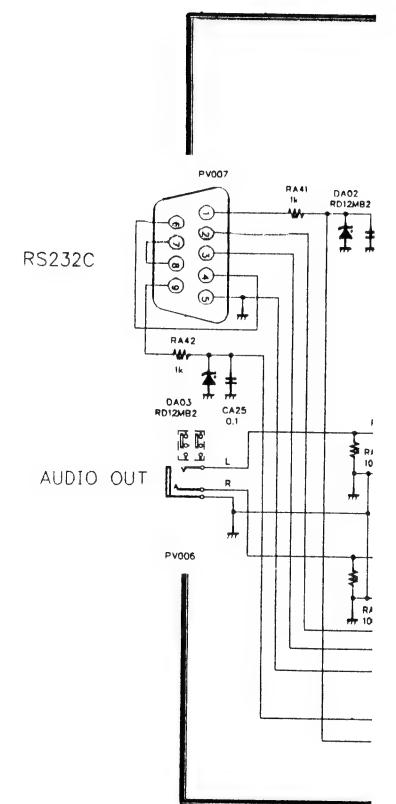
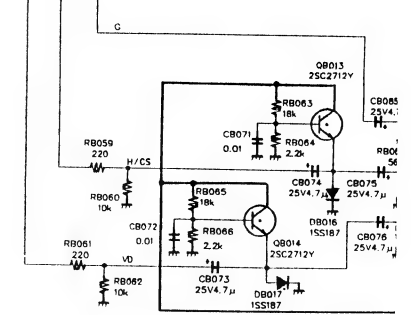
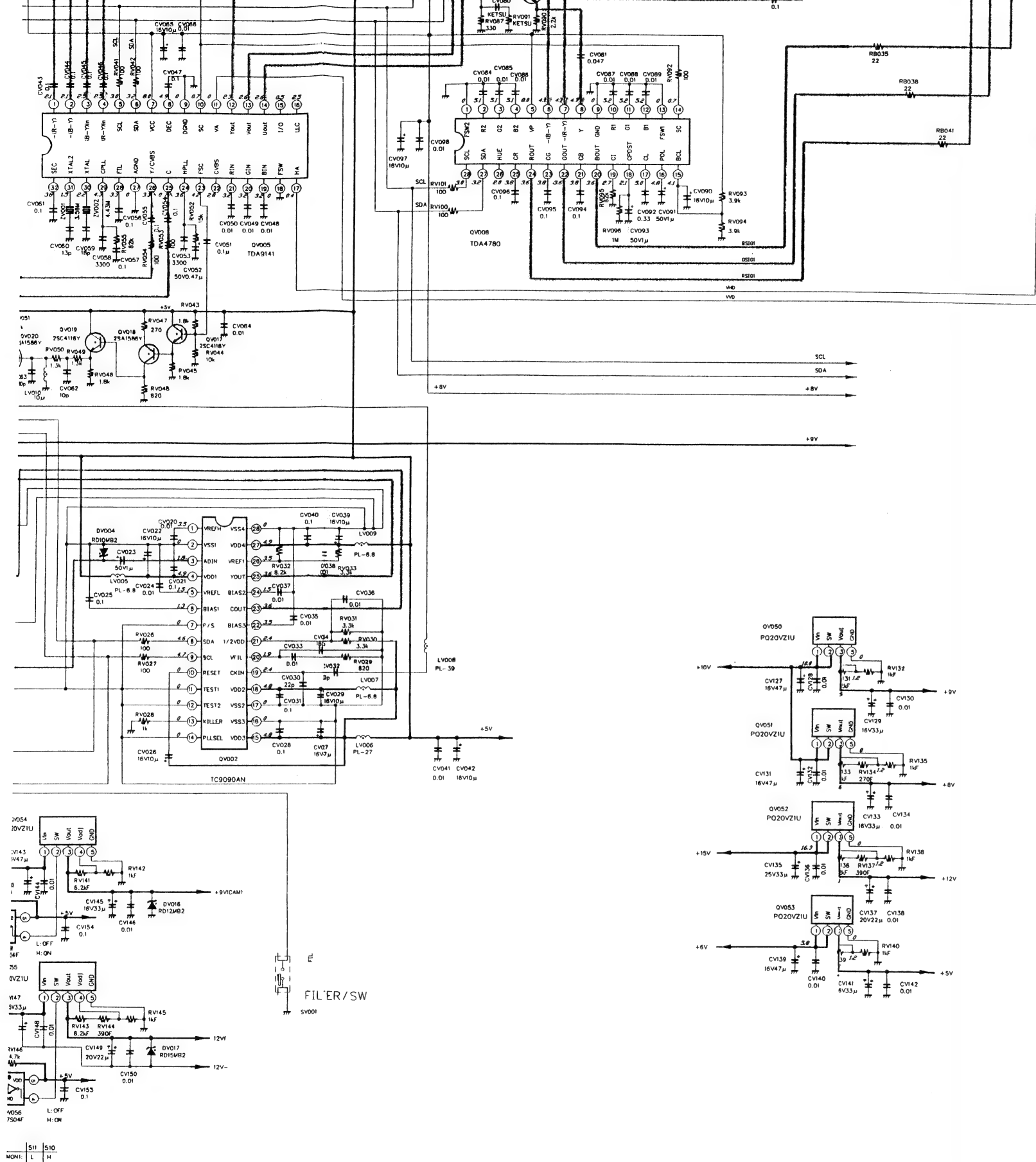


Fig. 4-1-1

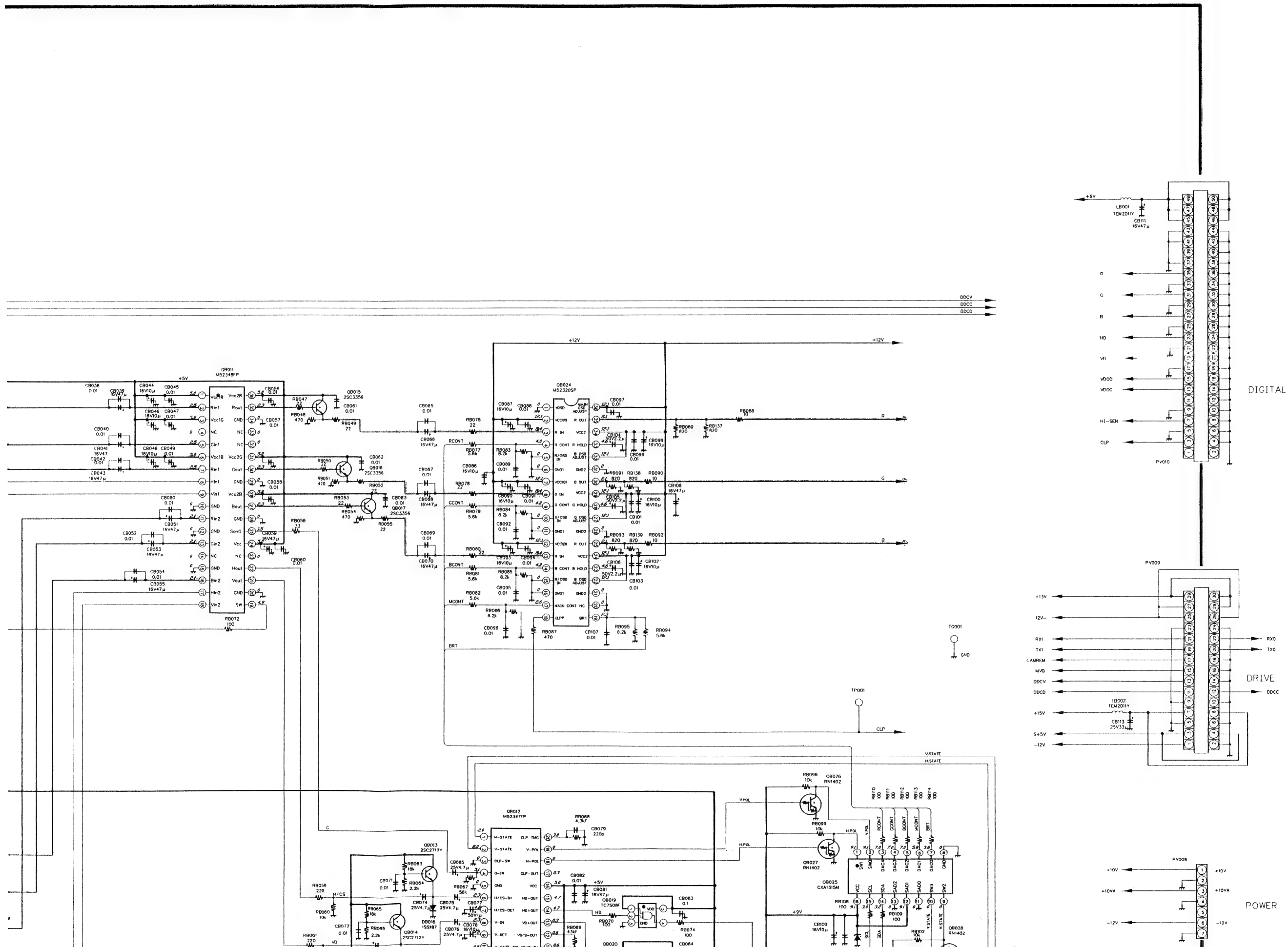
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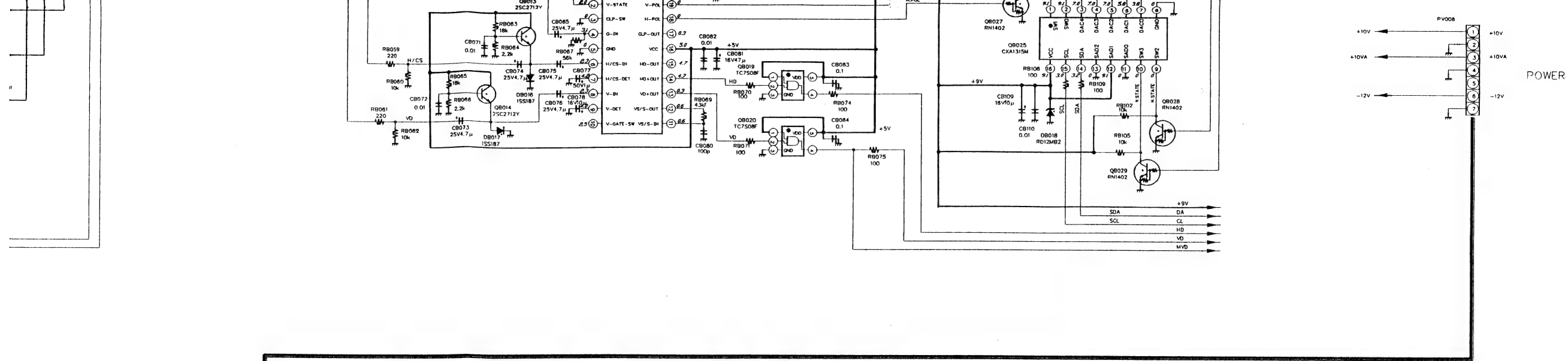






PB7557-1 VIDEO





PB7557-2 AUDIO

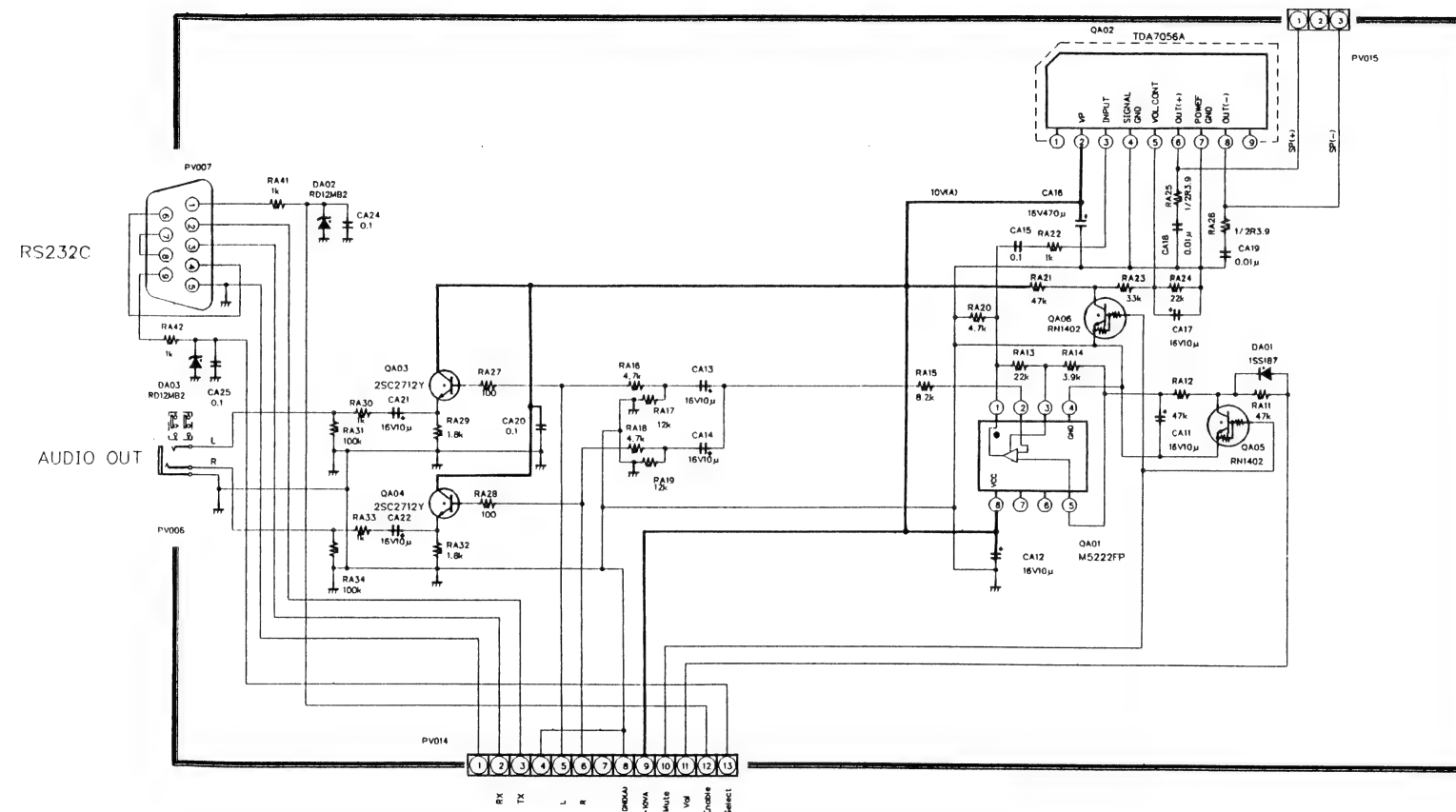
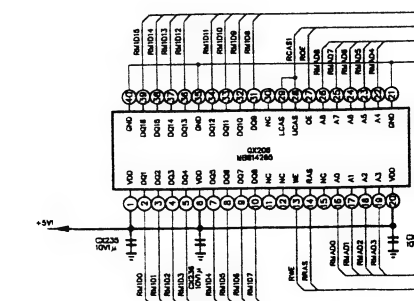


Fig. 4-2-1

1



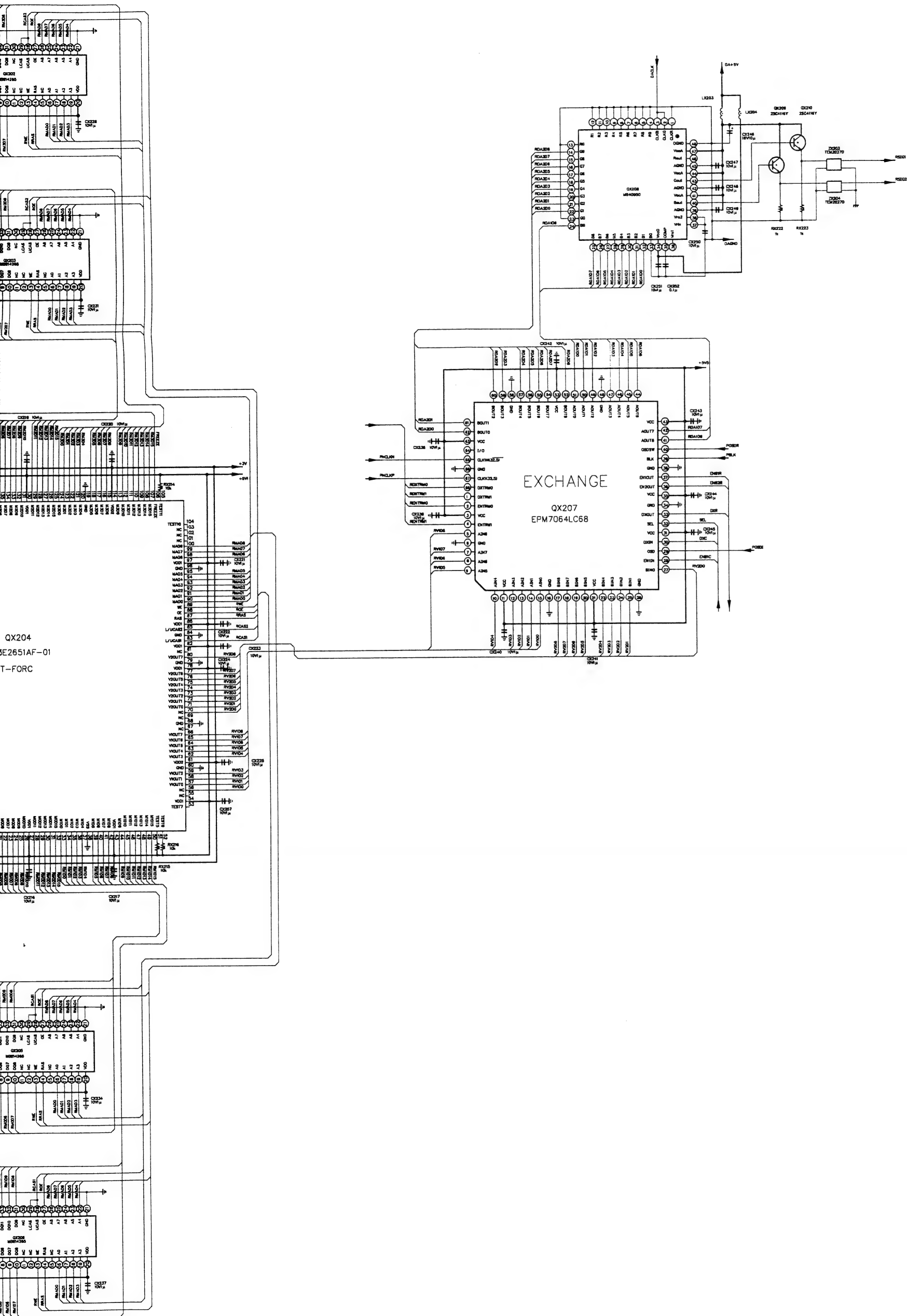


Fig. 4-3-1

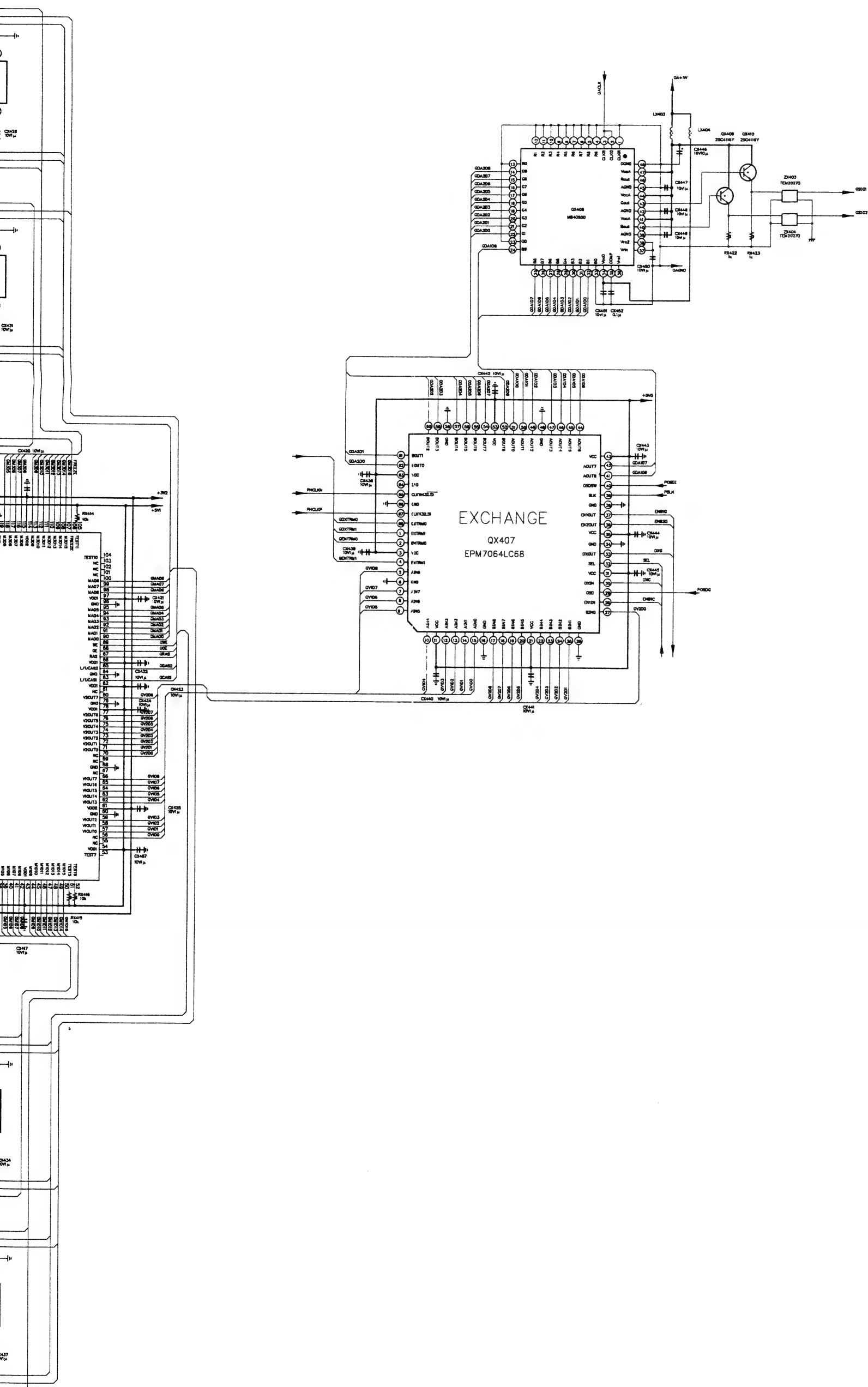
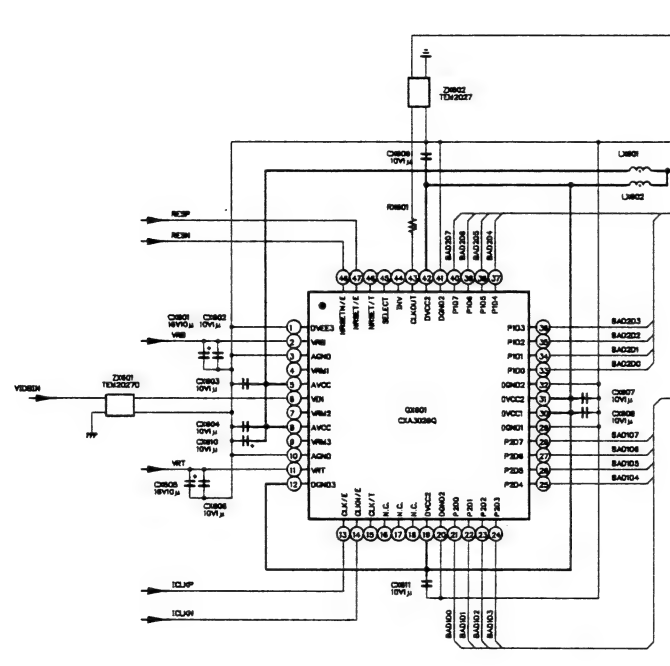
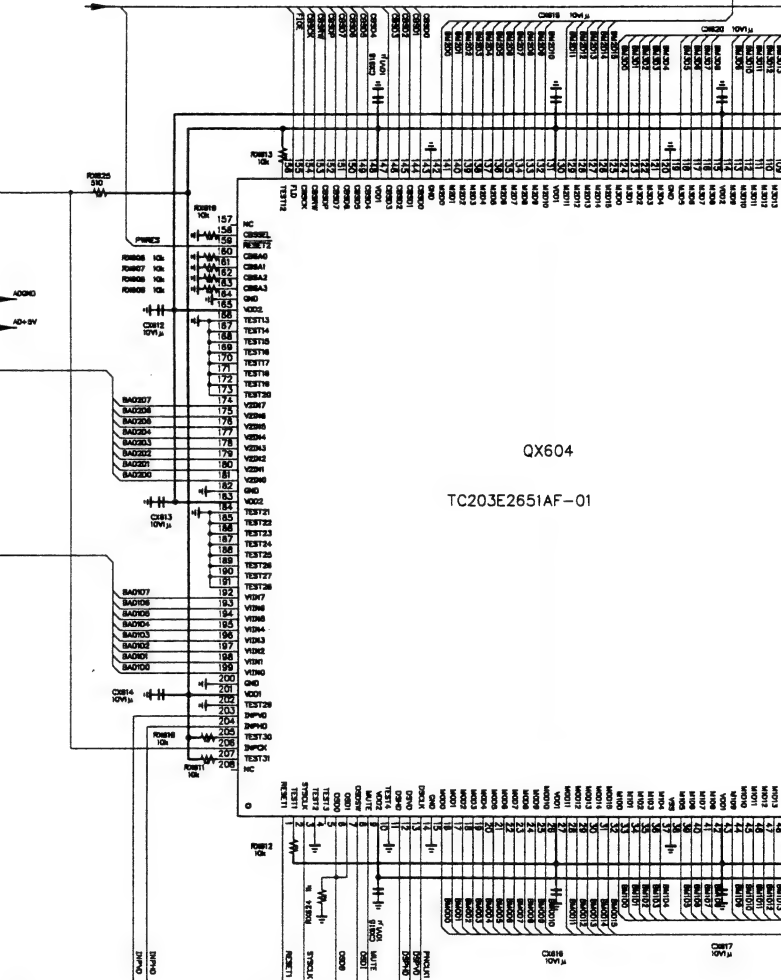


Fig. 4-4-1

	1	2	3	4	5	6	7	8
A	4-5. Digital (Bch) Circuit Diagram							
B								
C								
D								
E								
F								
G								
H								
I								
J								

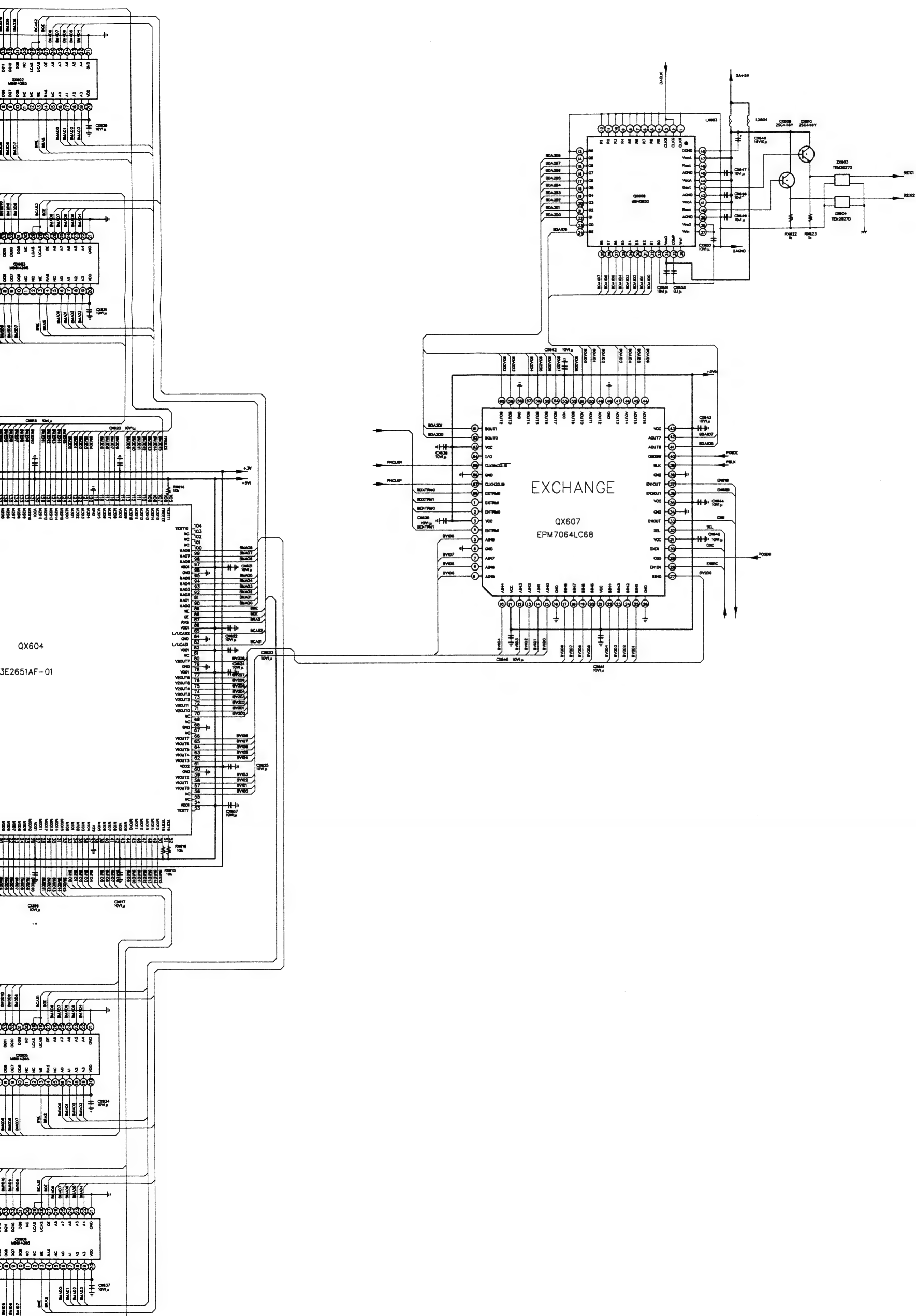


Fig. 4-5-1

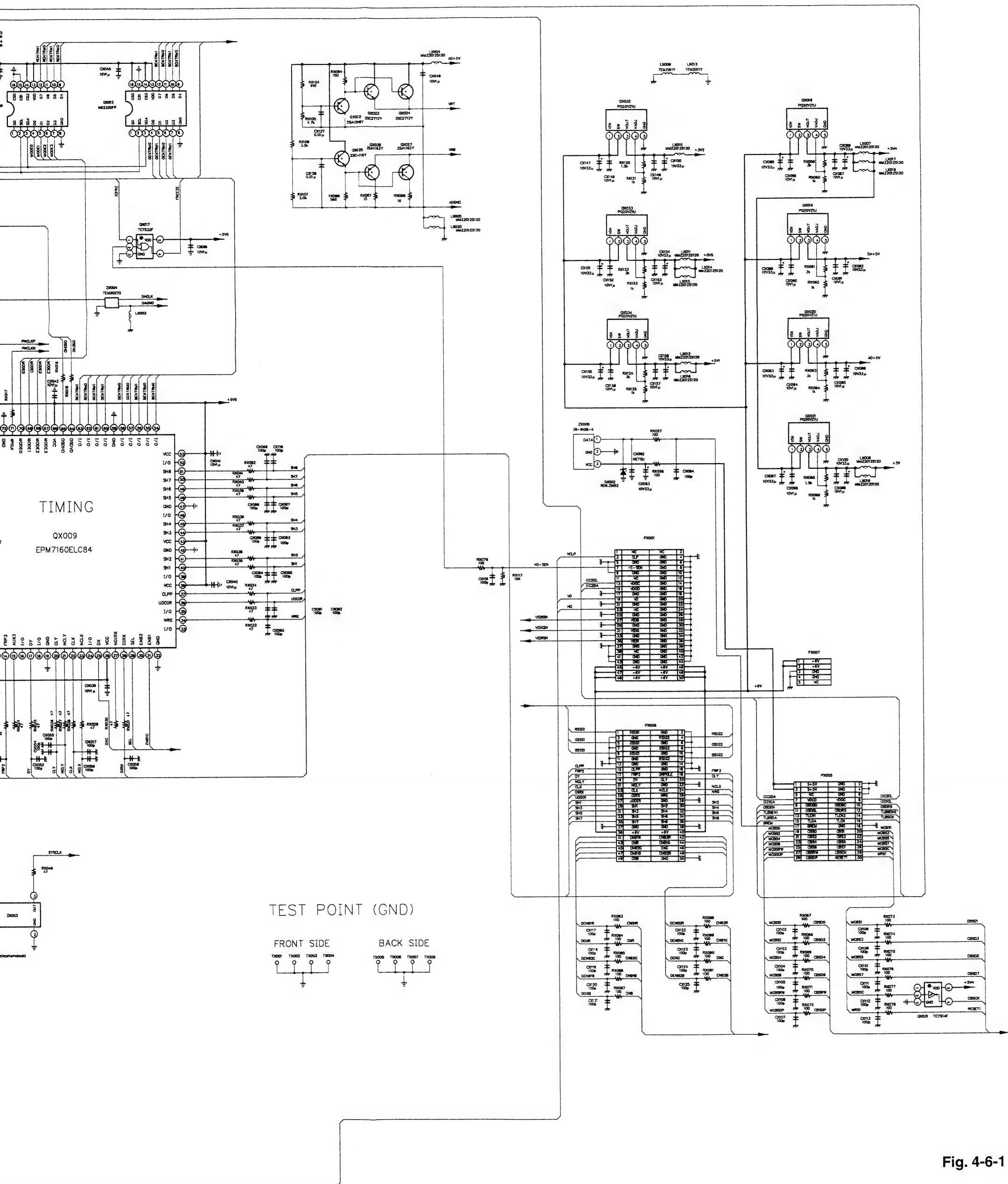
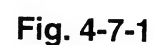


Fig. 4-6-1

J

FAN2.ER



1

2

3

4

5

6

7

8

A

B

C

4-8. Fan Control Circuit Diagram

D

E

F

G

H

I

J

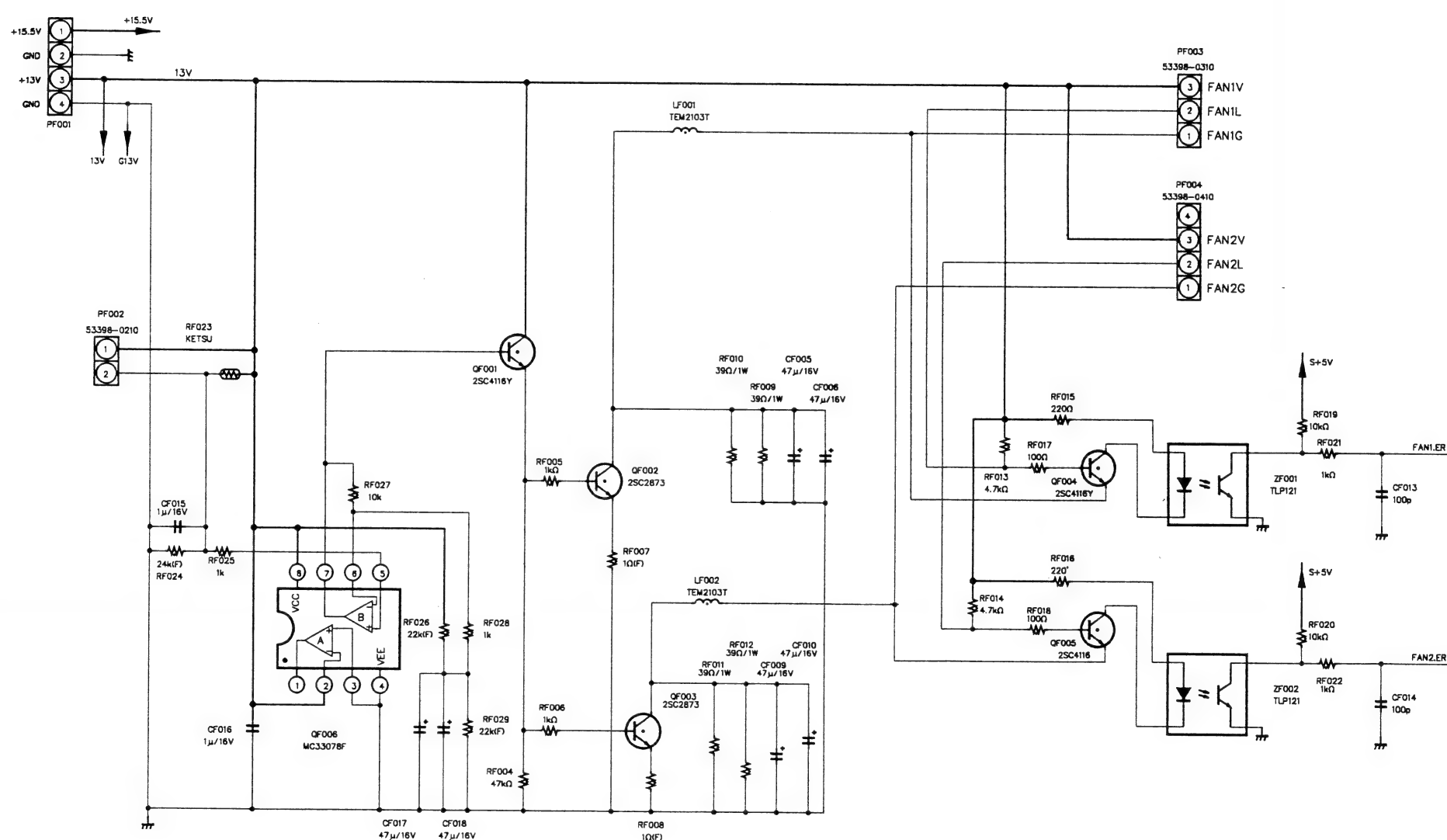


Fig. 4-8-1

4-9. Inverter Circuit Diagram (TLP511U/E)

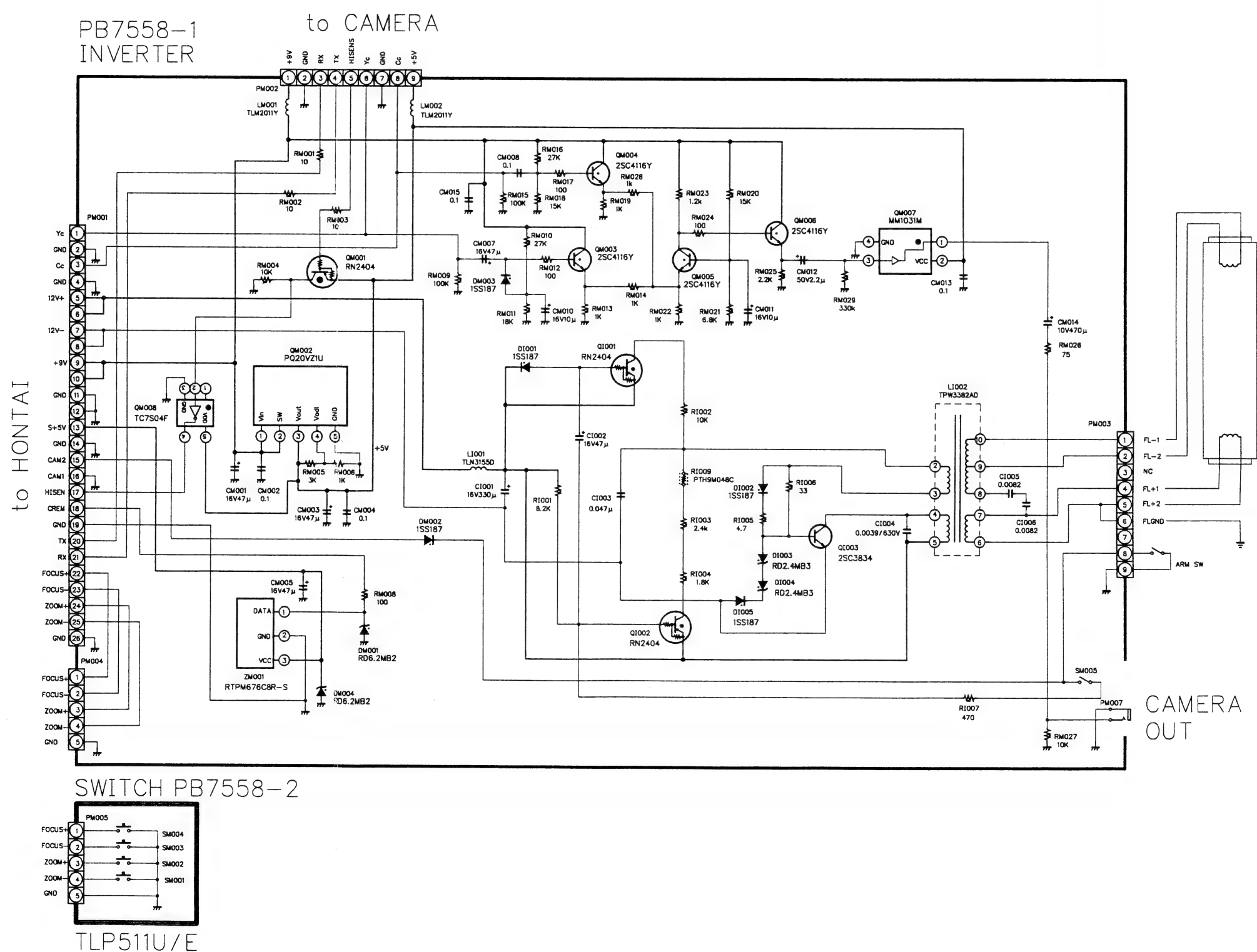


Fig. 4-9-1

4-10. Camera Circuit Diagram (TLP511U/E)

A

B

C

D

E

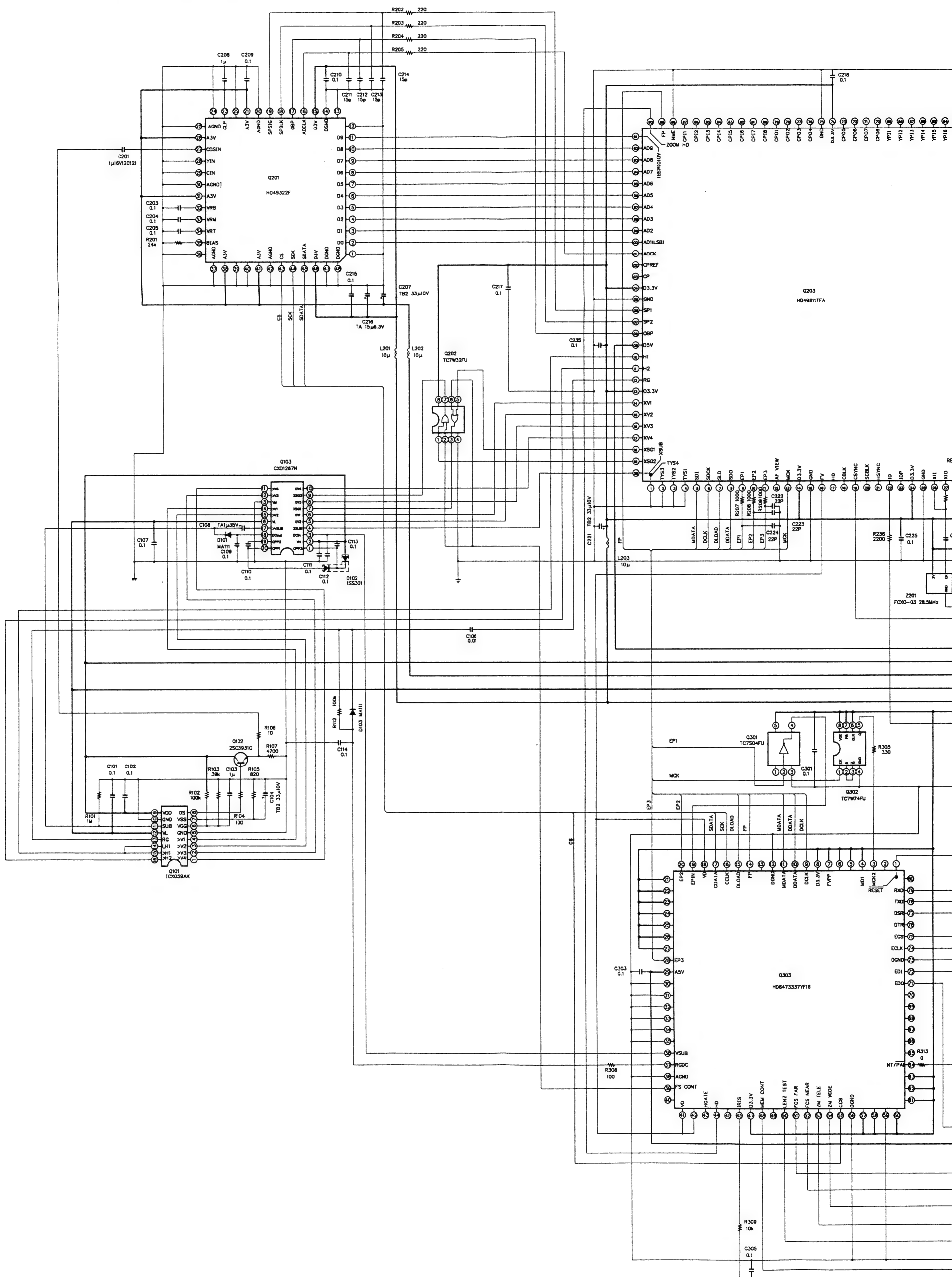
F

G

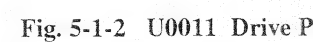
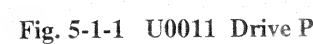
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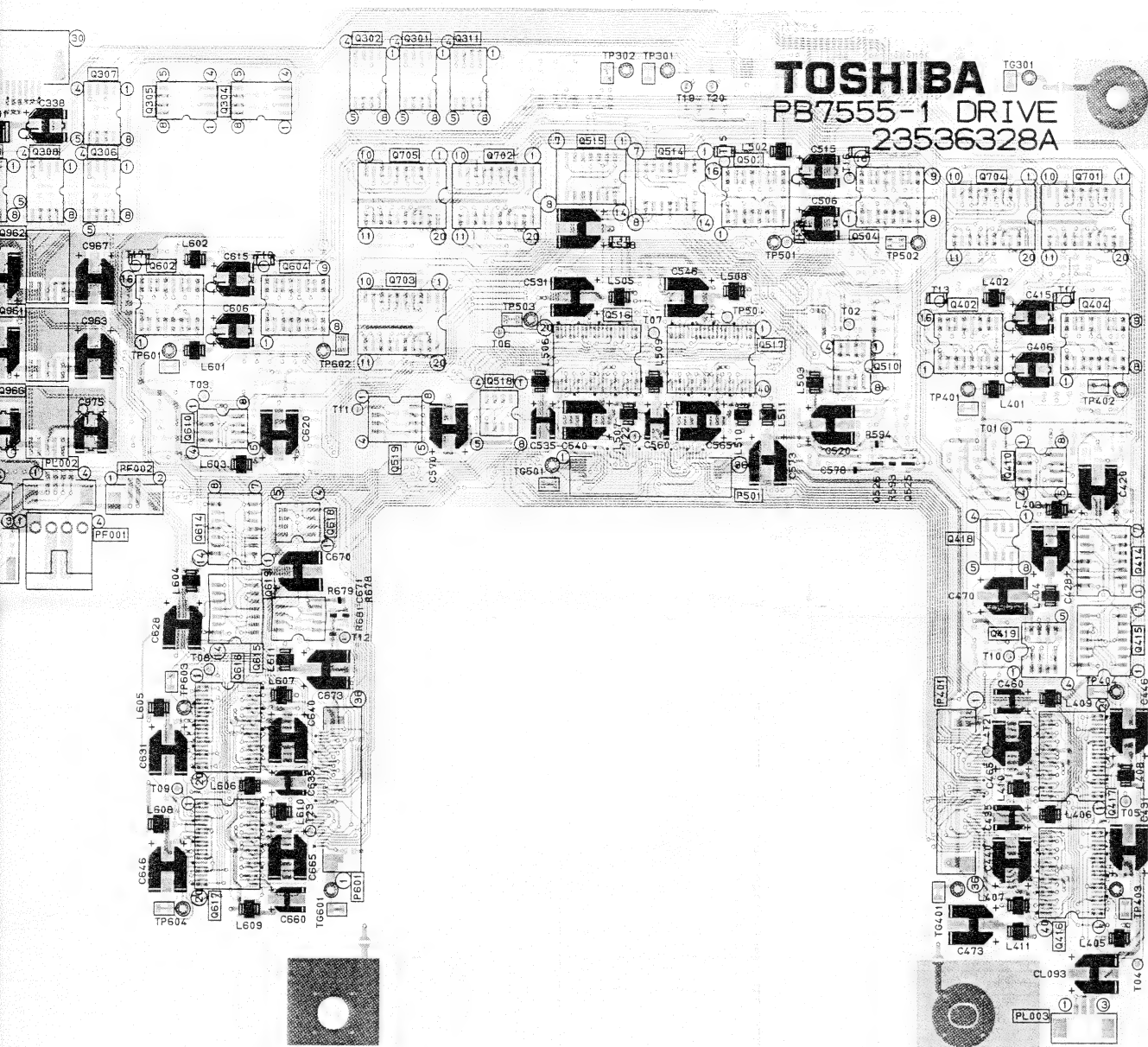
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J

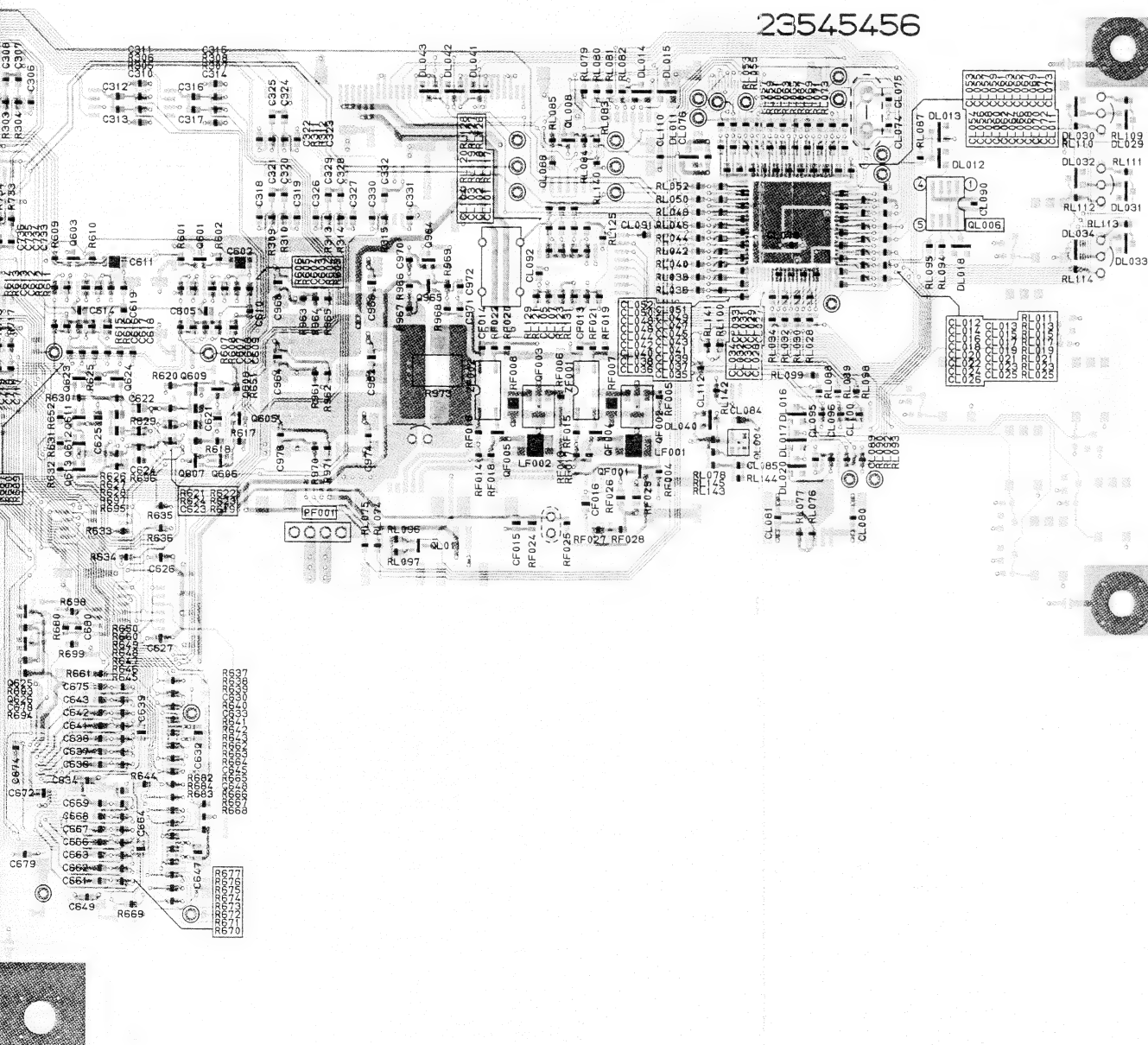


5-1. Drive PC Board





1-1 U0011 Drive PC Board (Top Side)



1-2 U0011 Drive PC Board (Bottom Side)

5-2. Digital PC Board

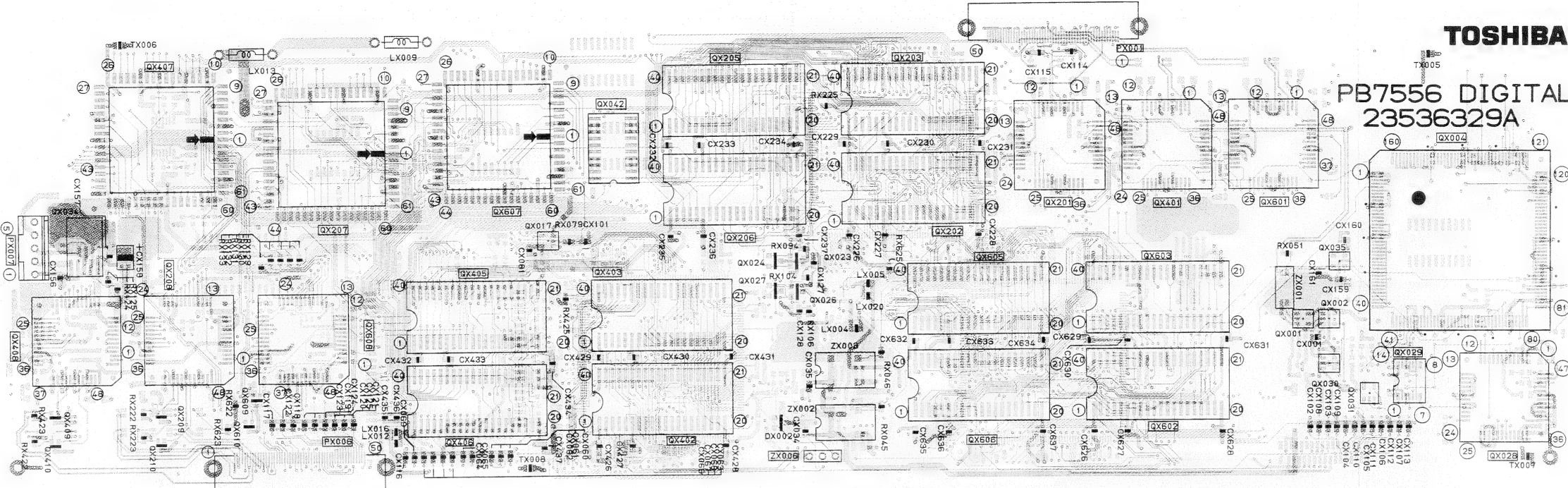


Fig. 5-2-1 U002 Digital PC Board (Top Side)

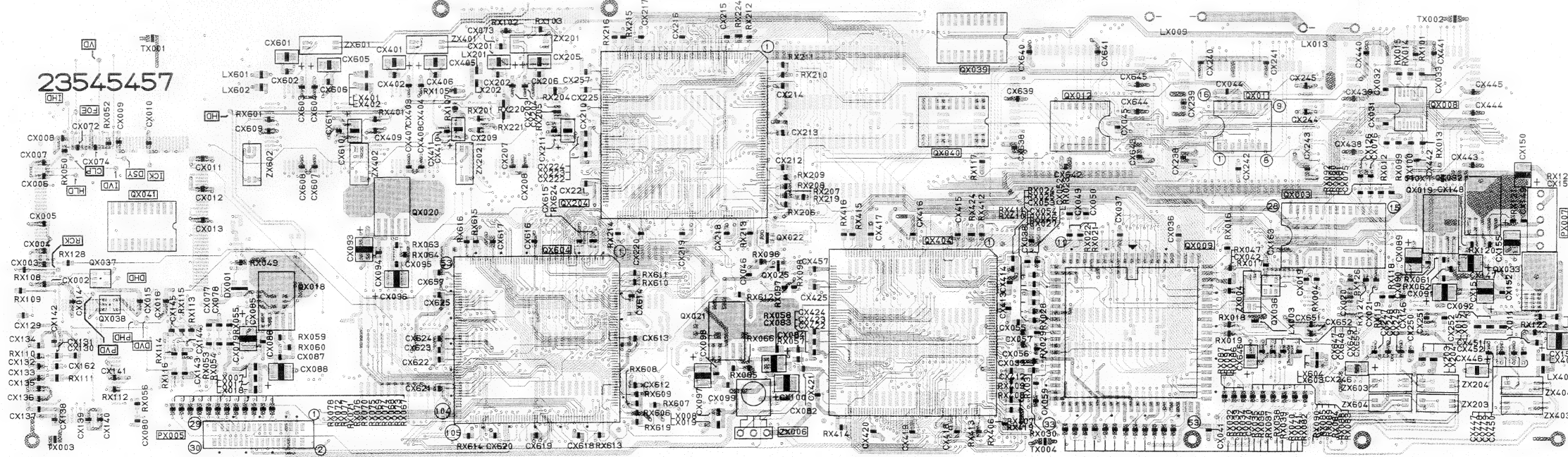


Fig. 5-2-2 U002 Digital PC Board (Bottom Side)

5-4. Inverter PC Board (TLP511U/E)

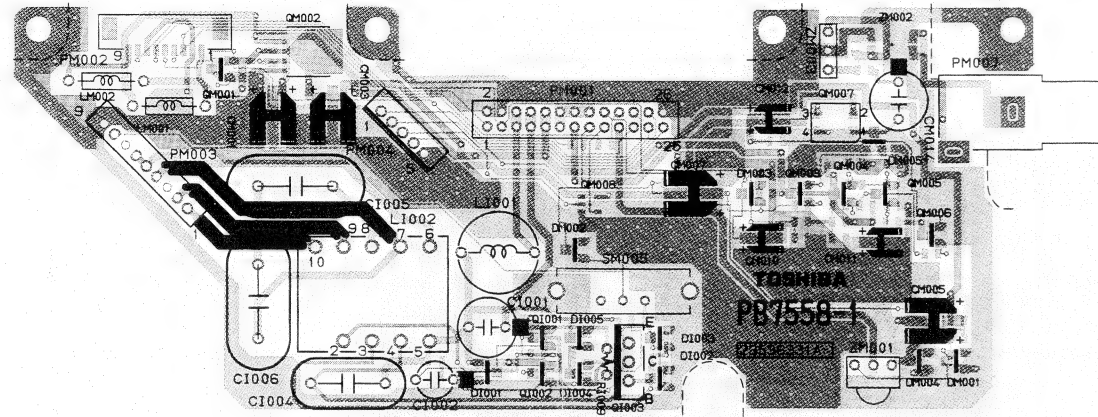


Fig. 5-4-1 U0041 Inverter PC Board (Top Side)

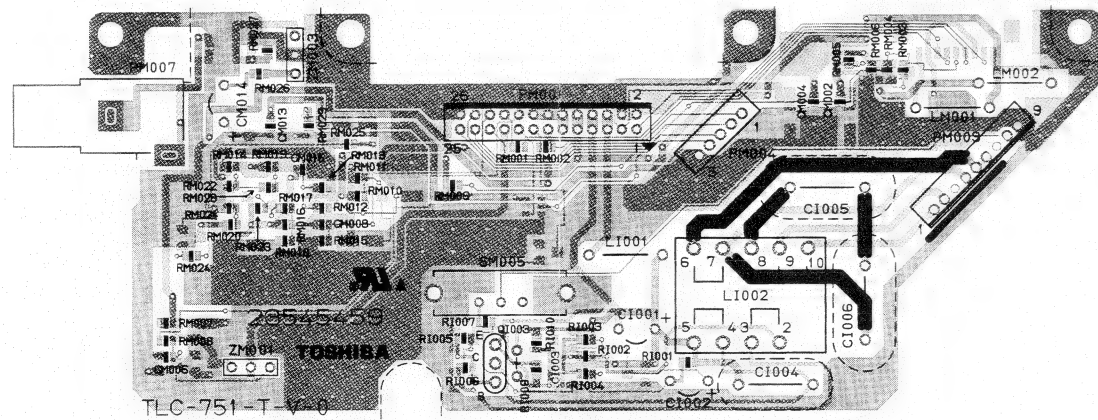


Fig. 5-4-2 U0041 Inverter PC Board (Bottom Side)

5-5. Switch PC Board (TLP511U/E)

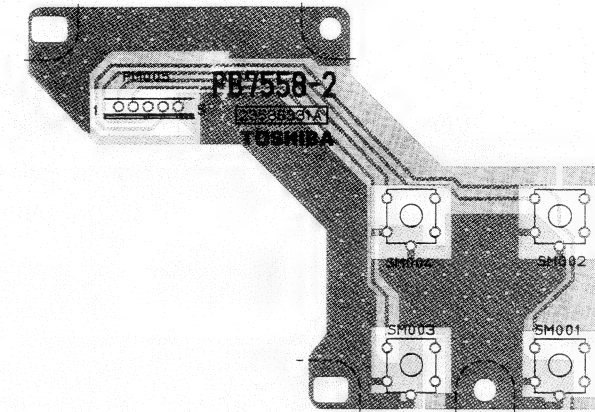


Fig. 5-5-1 U0042 Switch PC Board (Top Side)

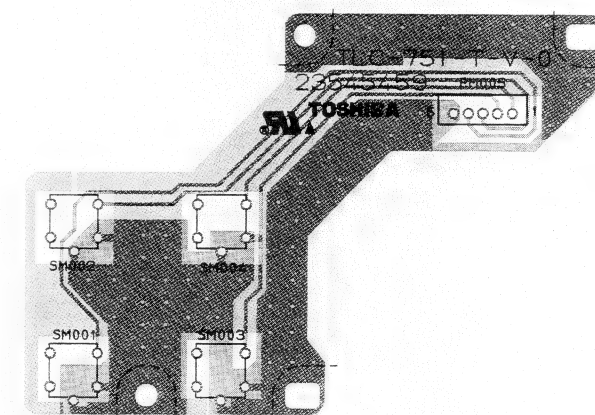


Fig. 5-5-2 U0042 Switch PC Board (Bottom Side)

5-6. Audio PC Board

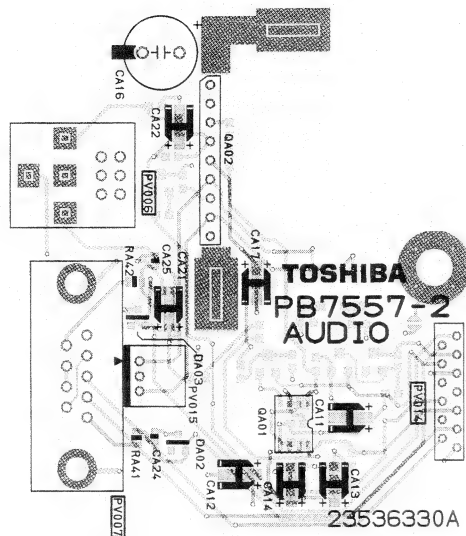


Fig. 5-6-1 U0032 Audio PC Board (Top Side)

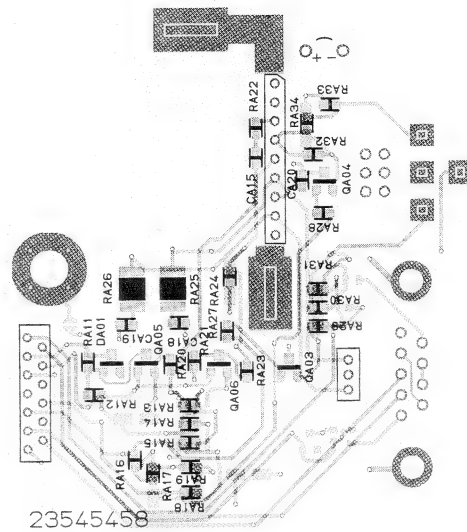


Fig. 5-6-2 U0032 Audio PC Board (Bottom Side)

5-7. Camera PC Board (TLP511U/E)

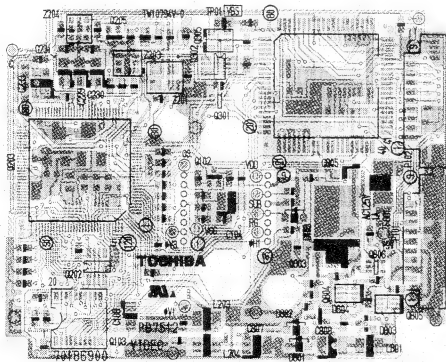


Fig. 5-7-1 U501 Camera PC Board (Top Side)

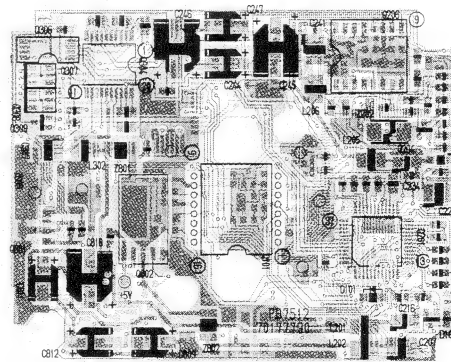


Fig. 5-7-2 U501 Camera PC Board (Bottom Side)

5-8. F-REM PC Board

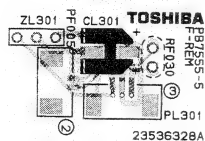


Fig. 5-8-1 U0015 F-REM PC Board (Top Side)

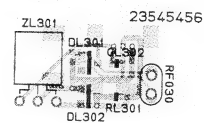


Fig. 5-8-2 U0015 F-REM PC Board (Bottom Side)

SECTION 3 PARTS LIST

SAFETY PRECAUTION

The parts identified by Δ mark are critical for safety. Replace only with part number specified.

The mounting position of replacement is to be identical with originals.

The substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

NOTICE

The part number must be used when ordering parts in order to assist in processing, be sure to include the model number and description.

Parts marked # are of chip type and mounted on original PC boards.

However, when they are placed for servicing works, use discrete parts listed on the parts list.

ABBREVIATIONS

1. Integrated circuit (IC)

2. Capacitor (Cap)

- Capacitance Tolerance (for Nominal Capacitance more than 10pF)

Table 2-0-1

Symbol	B	C	D	F	G	J	K	M	N
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20	± 30

Symbol	P	Q	T	U	V	W	X	Y	Z
Tolerance %	+ 100 0	+ 30 - 10	+ 50 - 10	+ 75 - 10	+ 20 - 10	+ 100 - 10	+ 40 - 20	+ 150 - 10	+ 80 - 20

Ex. 10 μ F J = 10 μ F $\pm 5\%$

- Capacitance Tolerance (for Nominal Capacitance 10pF or less)

Table 2-0-2

Symbol	B	C	D	F	G
Tolerance pF	± 0.1	± 0.25	± 0.5	± 1	± 2

Ex. 10pF G = 10pF ± 2 pF

3. Resistor (Res)

- Resistance tolerance

Table 3-0-1

Symbol	B	C	D	F	G	J	K	M
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20

Ex. 470 Ω J = 470 Ω $\pm 5\%$

4. EXPLODED VIEWS

4-1. Packing Assembly

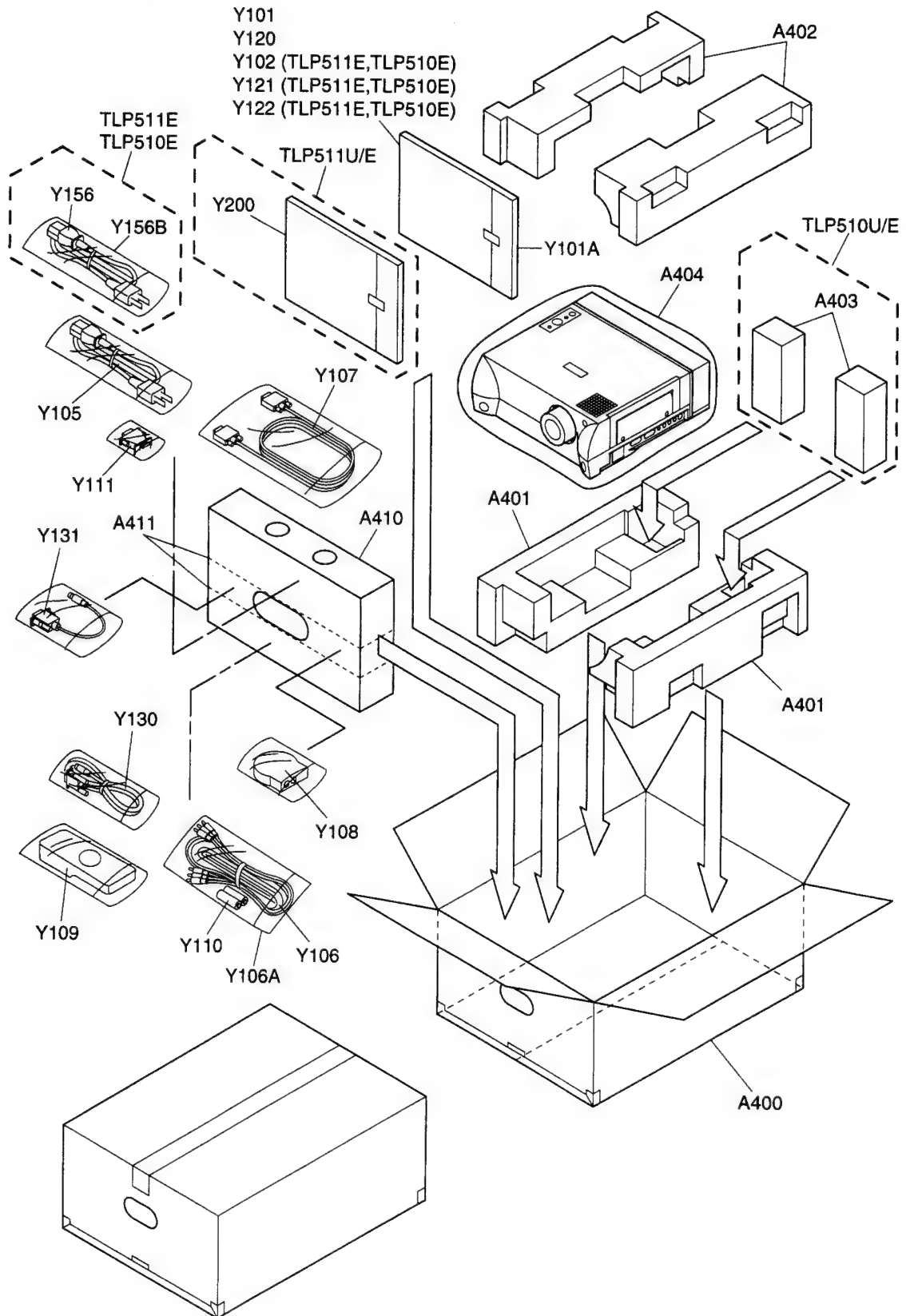


Fig. 4-1-1

4-2. Remote Control Unit

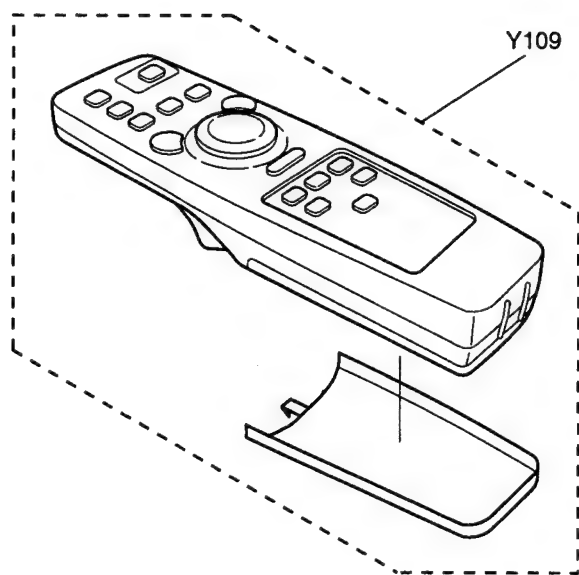


Fig. 4-2-1

4-3. Label Position

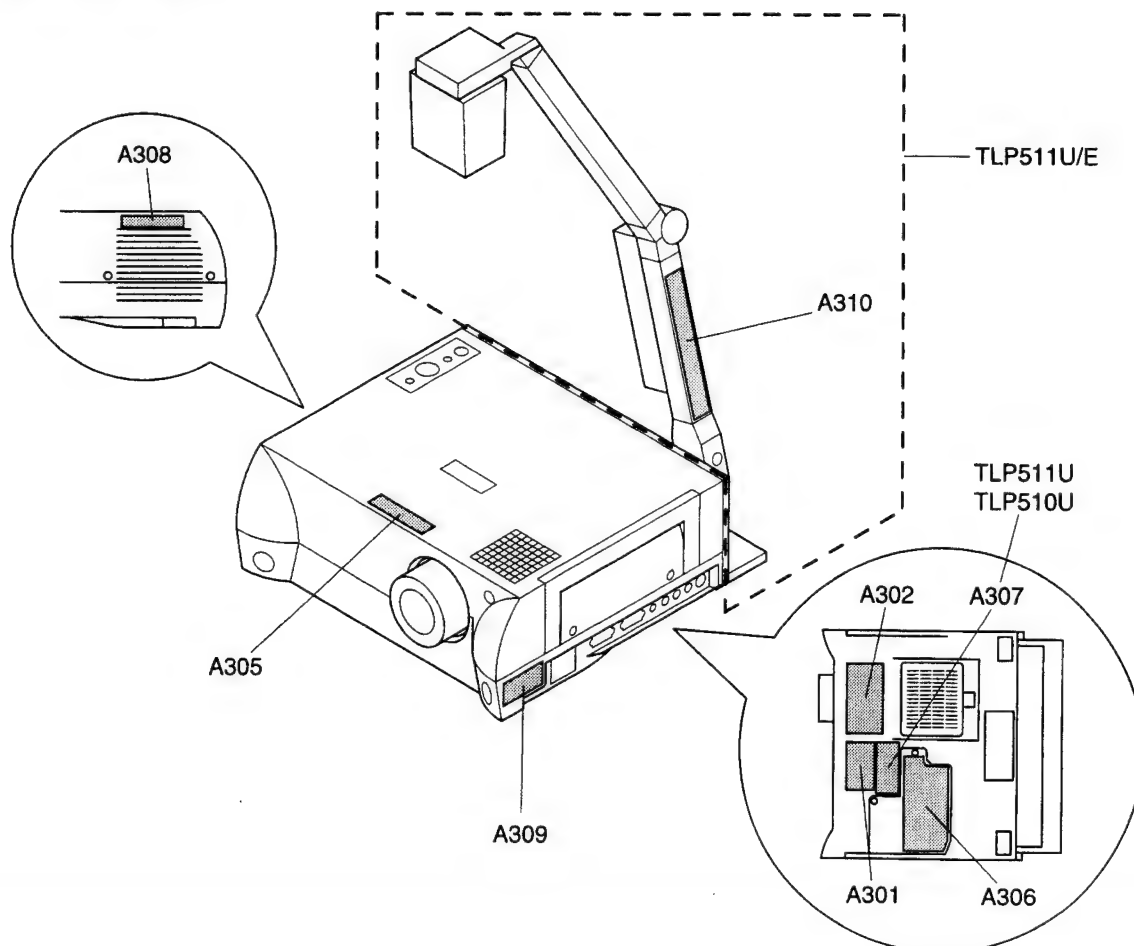


Fig. 4-3-1

4-4. Chassis Assembly

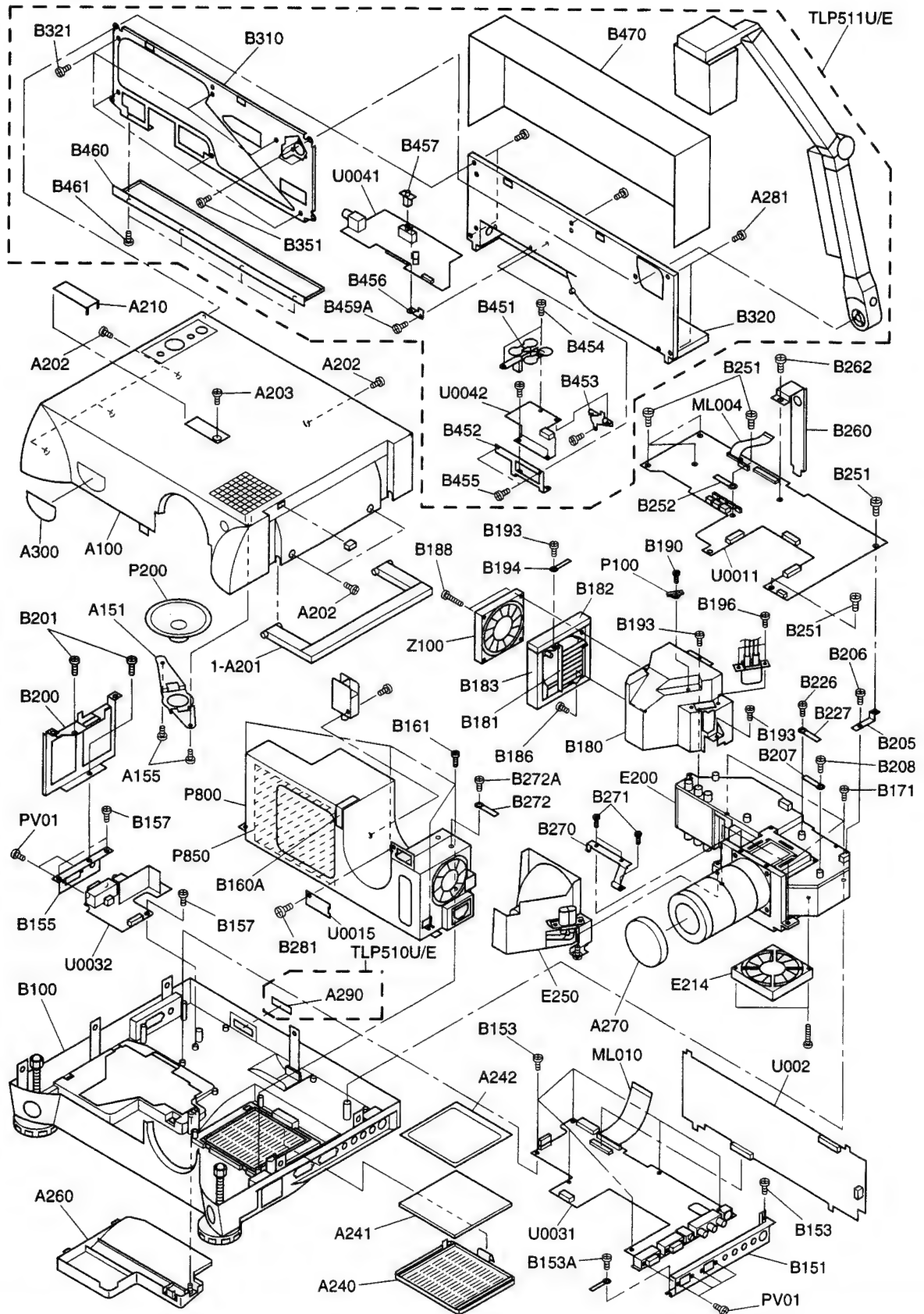


Fig. 4-4-1

4-5. Optical Box Assembly

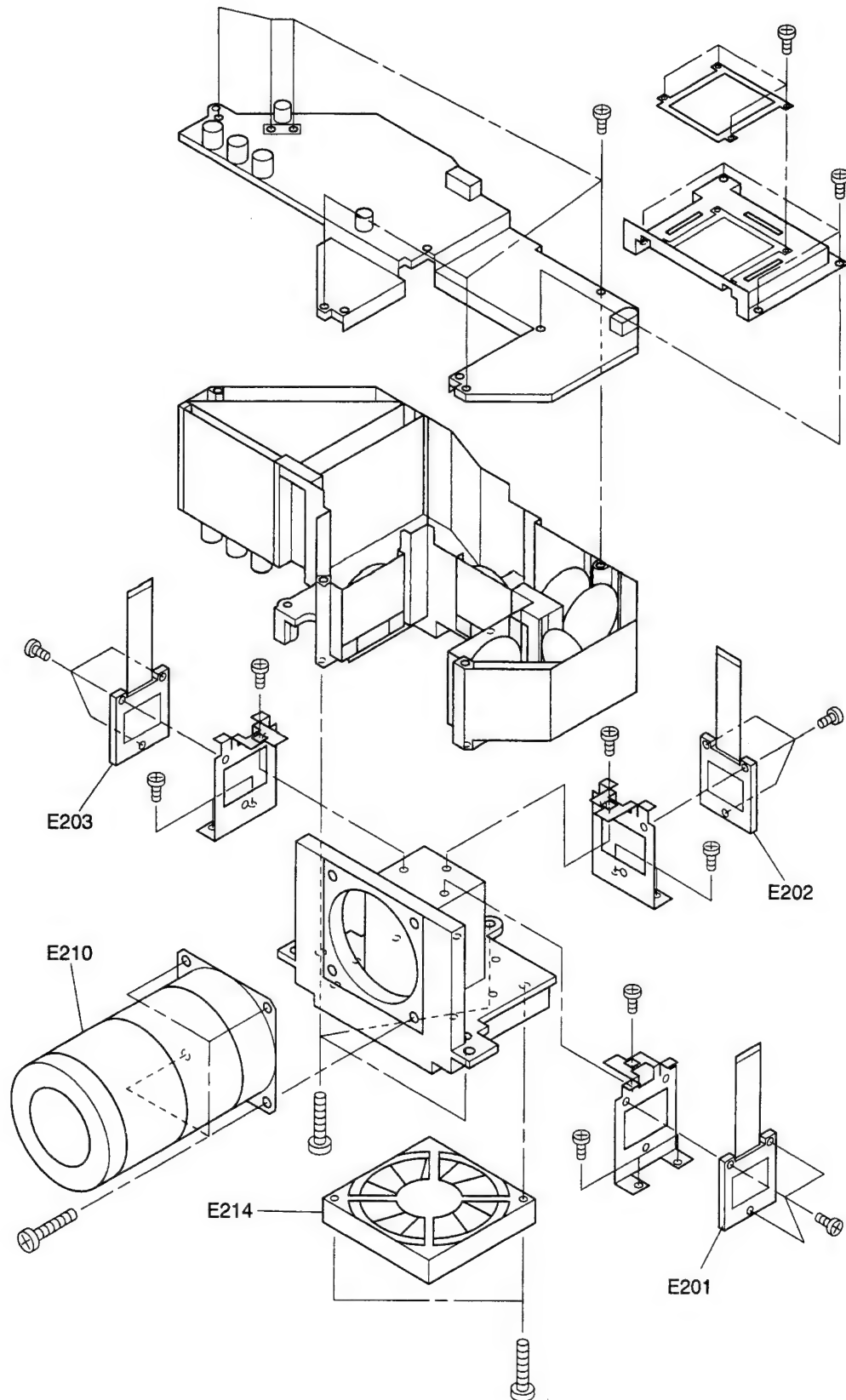


Fig. 4-5-1

4-6. Arm Assembly

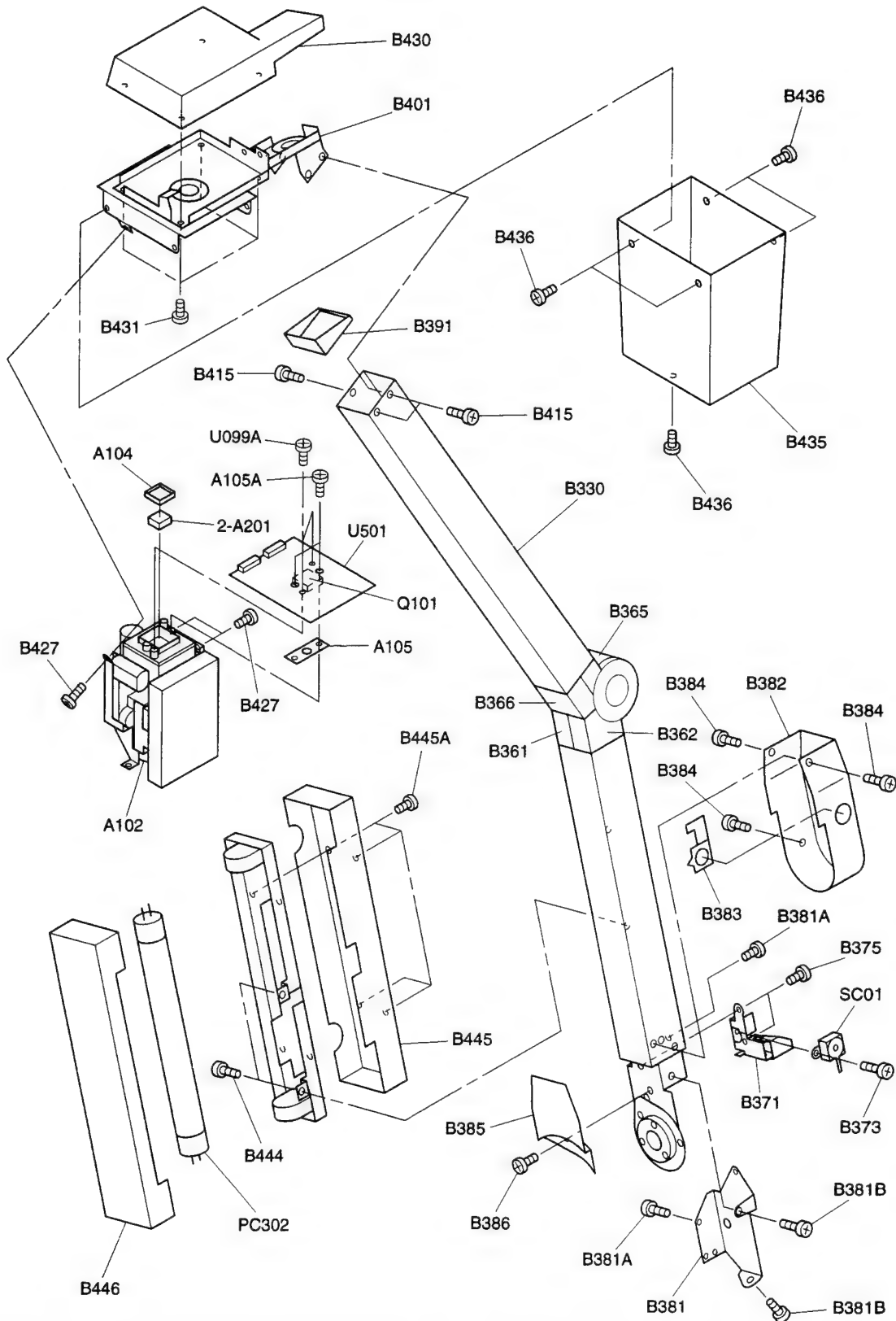


Fig. 4-6-1

5. PARTS LIST

LOCATION NUMBER	PART NUMBER	DESCRIPTION		LOCATION NUMBER	PART NUMBER	DESCRIPTION	
- MECHANICAL PARTS - (TLP511U/E)				B436	70391378	Screw	2x3mm
	△A100	23510269	Top Cover Assy	B444	23723264	Screw	2. 6x4mm
A155	23721016	Screw	2W3x6mm	△B445	23464597	Cover	FL Back
△1-A201	23975089	Handle Assy		B445A	70391378	Screw	2x3mm
2-A201	70153676	OPT. LPF	TF-S094-010	△B446	23464638	Cover	FC5
A202	23723317	Screw	4x8mm	B451	23445112	Button	
A203	23721308	Screw	3x8mm	B454	23723265	Screw	2. 6x5mm
A210	23975086	Top Tag Cover		B455	23710152	Screw	2. 0x3. 5mm
△A240	23975085	Filter Cover		B457	23445115	Cover	SLIDE SW
△A241	23460902	Air Filter		B459A	23710152	Screw	2. 0x3. 5mm
A242	23460903	Air Filter, Mesh		B460	23448475	Bottom Cover	
△A260	23975090	Lamp Cover Assy		B461	23710156	Screw	2. 6x6. 0mm
A270	23975087	Lens Cap		B470	23448473	Back Cover	
A281	23723317	Screw	4x8mm	△E200	23795580	Optical Engine	CJ301TA
A300	23560646	Sheet, Front, Tag		E201	23301296	LCD Panel	P13XM014 (R)
△A301	23560648	Label	Raiting	E202	23301297	LCD Panel	P13XM014 (G)
△A302	23560368	Label	Caution (Rear)	E203	23301298	LCD Panel	P13XM014 (B)
△A305	23560649	Label	Caution (Lens)	Q101	70200608	IC	ICX059AK-6
△A306	23560650	Label	Caution (Lamp Change)	△ML004	23504883	Wire	FFC, 30P
△A307	23560651	Label	Caution (Interlock)	△ML010	23504884	Wire	FFC, 30P
△A308	23560382	Label	Caution (Hot)	△P100	23144569	Thermal Lead SW	OHD3-100B
△A309	23560652	Label	Caution (AC Cord)	P200	23351111	Speaker	SPK-1378
△A310	23560653	Label	Caution (Arm)	△P800	23795577	Main Power Assy	APS-100
A400	23525358	Case		△P850	23795579	Lamp Driver	
A401	23935674	Packing	Bottom	PC302	23905651	Fluorescence Light	FL4N
A402	23935675	Packing	Top	SC01	23344401	Switch, Detect	
A404	23943034	Bag		U099A	70391261	Screw	2x4mm
A410	23525359	Accesssory Box		△Y101	23552631	Owners Manual	English
A411	23525360	Partition Board		Y101A	23943846	Cover	
△B100	23510263	Chassis Bottom Assy		△Y105	23176937	Power Cord	125V, 13A
B153	23721016	Screw	2W3x6mm	Y106	23368618	Pin Cable	3P
B153A	70391440	Screw	3x10mm	Y106A	23943855	Cover	
B157	23721016	Screw	2W3x6mm	Y108	23306241	Remote Sensor Unit	
B160A	23460943	Screw	10x80x0. 1	△Y109	23306240	Remote Control Unit	
B161	23721016	Screw	2W3x6mm	Y109A	23943846	Cover	
B171	23721014	Screw	4x20mm	Y111	23368679	MAC Adaptor	
B188	23721018	Screw	2W3x25mm	Y120	23552633	Quick Card	English
B190	70391440	Screw	3x10mm	Y130	23368676	Cable	DSUB, 9P
B193	23721308	Screw	3x8mm	Y131	23368677	Cable	DIN4P-DSUB9P
B196	70391440	Screw	3x10mm	Y200	23460918	Document Sheet	
B201	23721308	Screw	3x8mm	△Z100	23125481	Fan	DC12V
B206	23721308	Screw	3x8mm	- DIFFERENCE LIST - (TLP511E)			
B207	23845860	Clamp		△A260	23975092	Lamp Cover Assy	
B208	23721016	Screw	2W3x6mm	△A301	23560746	Label	Raiting
B226	23721016	Screw	2W3x6mm	△A307	-----		
B251	23721308	Screw	3x8mm	A400	23525432	Case	
B252	23845859	Clamp		B430	23448488	Cover	Camera, Top
B262	23721308	Screw	3x8mm	B435	23448489	Cover	Camera, Lens
B271	23721306	Screw	3x6mm	△Y101	23552664	Owners Manual	English
B272	23845859	Clamp		△Y102	23552632	Owners Manual	French/German
B272A	23721306	Screw	3x6mm	△Y105	23176002	Power Cord	125V, 13A
B281	23721306	Screw	3x6mm	Y121	23552635	Quick Card	French
B320	23448477	Cover Assy		Y122	23552636	Quick Card	German
B321	23710179	Screw	2. 6x5mm	Y156	23372019	Power Cord	UK
B330	23470480	Arm Assy		Y156B	23943846	Cover	
B361	23464589	Cover	2AA				
B362	23464590	Cover	2AB				
B365	23464591	Cover	2BA				
B366	23464592	Cover	2BB				
B373	23723265	Screw	2. 6x5mm				
B375	23723264	Screw	2. 6x4mm				
B381A	23710176	Screw	2. 6x4mm				
B382	23464602	Cover					
B383	23445113	Button					
B384	70391378	Screw	2x3mm				
B385	23464603	Cover	SUB				
B386	70391378	Screw	2x3mm				
B391	23464604	Cover	3J				
B415	23710176	Screw	2. 6x4mm				
B427	70391378	Screw	2x3mm				
B430	23448474	Cover	Camera, Top				
B435	23448469	Cover	Camera, Lens				

LOCATION NUMBER	PART NUMBER	DESCRIPTION
- MECHANICAL PARTS - (TLP510U/E)		
△A100	23510269	Top Cover Assy
A155	23721016	Screw 2W3x6mm
△1-A201	23975089	Handle Assy
A202	23723317	Screw 4x8mm
A203	23721308	Screw 3x8mm
A210	23975086	Top Tag Cover
△A240	23975085	Filter Cover
△A241	23460902	Air Filter
A242	23460903	Air Filter, Mesh
△A260	23975090	Lamp Cover Assy
A270	23975087	Lens Cap
A290	23460915	Sheet
A300	23560690	Sheet, Front, Tag
△A301	23560747	Label Rating
△A305	23560649	Label Caution (Lens)
△A306	23560650	Label Caution (Lamp Change)
△A307	23560651	Label Caution (Interlock)
△A309	23560652	Label Caution (AC Cord)
A400	23525433	Case
A401	23935674	Packing Bottom
A402	23935675	Packing Top
A403	23935706	Packing, Sub
A404	23943038	Bag
A410	23525359	Accesssory Box
A411	23525360	Partition Board
△B100	23510263	Chassis Bottom Assy
B153	23721016	Screw 2W3x6mm
B153A	70391440	Screw 3x10mm
B157	23721016	Screw 2W3x6mm
B160A	23460943	Screw 10x80x0.1
B161	23721016	Screw 2W3x6mm
B171	23721014	Screw 4x20mm
B188	23721018	Screw 2W3x25mm
B190	70391440	Screw 3x10mm
B193	23721308	Screw 3x8mm
B196	70391440	Screw 3x10mm
B201	23721308	Screw 3x8mm
B206	23721308	Screw 3x8mm
B207	23845860	Clamp
B208	23721016	Screw 2W3x6mm
B226	23721016	Screw 2W3x6mm
B251	23721308	Screw 3x8mm
B252	23845859	Clamp
B262	23721308	Screw 3x8mm
B271	23721306	Screw 3x6mm
B272	23845859	Clamp
B272A	23721306	Screw 3x6mm
B281	23721306	Screw 3x6mm
△E200	23795580	Optical Engine CJ301TA
E201	23301296	LCD Panel P13XM014 (R)
E202	23301297	LCD Panel P13XM014 (G)
E203	23301298	LCD Panel P13XM014 (B)
△ML004	23504883	Wire FFC, 30P
△ML010	23504884	Wire FFC, 30P
△P100	23144569	Thermal Lead SW OHD3-100B
P200	23351111	Speaker SPK-1378
△P800	23795577	Main Power Assy APS-100
△P850	23795579	Lamp Driver
△Y101	23552631	Owners Manual English
Y101A	23943846	Cover
△Y105	23176937	Power Cord 125V, 13A
Y106	23368618	Pin Cable 3P
Y106A	23943855	Cover
Y108	23306241	Remote Sensor Unit
△Y109	23306251	Remote Control Unit
Y109A	23943846	Cover
Y111	23368679	MAC Adaptor
Y120	23552633	Quick Card English
Y130	23368676	Cable DSUB, 9P
Y131	23368677	Cable DIN4P-DSUB9P
△Z100	23125481	Fan DC12V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
- DIFFERENCE LIST - (TLP510E)		
△A260	23975092	Lamp Cover Assy
△A301	23560749	Label Raiting
△A307	-----	
A400	23525435	Case
△Y101	23552664	Owners Manual English
△Y102	23552632	Owners Manual French/German
△Y105	23176002	Power Cord 125V, 13A
Y121	23552635	Quick Card French
Y122	23552636	Quick Card German
Y156	23372019	Power Cord UK
Y156B	23943846	Cover

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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- ELECTRICAL PARTS -

U0011	23781065	PC Board Assy Drive - INTEGRATED CIRCUITS -
Q301	23905501	IC SN75372PS
Q302	23905501	IC SN75372PS
Q304	23905501	IC SN75372PS
Q305	23905501	IC SN75372PS
Q306	23905501	IC SN75372PS
Q307	23905501	IC SN75372PS
Q308	23905501	IC SN75372PS
Q309	23905501	IC SN75372PS
Q310	A6030620	IC TC7S04F
Q311	23905501	IC SN75372PS
Q402	23319800	IC LM1201M
Q404	23319800	IC LM1201M
Q410	23906225	IC AD8072JR
Q414	23905503	IC UPD74HC4066A
Q415	23905503	IC UPD74HC4066A
Q416	23905898	IC CXA2504N
Q417	23905898	IC CXA2504N
Q418	A6030912	IC TC4W66F
Q419	23906226	IC EL2244CS
Q502	23319800	IC LM1201M
Q504	23319800	IC LM1201M
Q510	23906225	IC AD8072JR
Q514	23905503	IC UPD74HC4066A
Q515	23905503	IC UPD74HC4066A
Q516	23905898	IC CXA2504N
Q517	23905898	IC CXA2504N
Q518	A6030912	IC TC4W66F
Q519	23906226	IC EL2244CS
Q602	23319800	IC LM1201M
Q604	23319800	IC LM1201M
Q610	23906225	IC AD8072JR
Q614	23905503	IC UPD74HC4066A
Q615	23905503	IC UPD74HC4066A
Q616	23905898	IC CXA2504N
Q617	23905898	IC CXA2504N
Q618	A6030912	IC TC4W66F
Q619	23906226	IC EL2244CS
Q701	23906224	IC M62399FP
Q702	23906224	IC M62399FP
Q703	23906224	IC M62399FP
Q704	23906224	IC M62399FP
Q705	23906224	IC M62399FP
Q961	70129738	IC PQ20VZ1U
Q962	70129738	IC PQ20VZ1U
Q966	70129738	IC PQ20VZ1U
QF006	23319214	IC MC33078M
QL003	70129738	IC PQ20VZ1U
QL004	70200430	IC RN5VD27A
QL005	23904881	IC MC74HC14AF
QL006	23906209	IC CAT24C16J
QL007	70129902	IC MC74HC541FEL
QL009	B0488392	IC TC74HC125AF
QL010	70129907	IC MC74HC165F
QL012	B0488392	IC TC74HC125AF
- TRANSISTORS -		
Q312	23314323	Transistor, Chip UN5211
Q313	23314323	Transistor, Chip UN5211
Q314	23314323	Transistor, Chip UN5211
Q316	23314322	Transistor, Chip UN5111
Q317	23314322	Transistor, Chip UN5111
Q318	23314322	Transistor, Chip UN5111
Q401	A6365620	Transistor, Chip 2SC4116-Y
Q403	A6365620	Transistor, Chip 2SC4116-Y
Q405	A6549570	Transistor, Chip 2SA1586-Y
Q408	A6365620	Transistor, Chip 2SC4116-Y
Q409	A6549570	Transistor, Chip 2SA1586-Y
Q411	A6549570	Transistor, Chip 2SA1586-Y
Q423	A6365620	Transistor, Chip 2SC4116-Y
Q424	A6549570	Transistor, Chip 2SA1586-Y

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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Q425	A6365620	Transistor, Chip 2SC4116-Y
Q426	A6549570	Transistor, Chip 2SA1586-Y
Q501	A6365620	Transistor, Chip 2SC4116-Y
Q503	A6365620	Transistor, Chip 2SC4116-Y
Q505	A6549570	Transistor, Chip 2SA1586-Y
Q508	A6365620	Transistor, Chip 2SC4116-Y
Q509	A6549570	Transistor, Chip 2SA1586-Y
Q511	A6549570	Transistor, Chip 2SA1586-Y
Q523	A6365620	Transistor, Chip 2SC4116-Y
Q524	A6549570	Transistor, Chip 2SA1586-Y
Q525	A6365620	Transistor, Chip 2SC4116-Y
Q526	A6549570	Transistor, Chip 2SA1586-Y
Q601	A6365620	Transistor, Chip 2SC4116-Y
Q603	A6365620	Transistor, Chip 2SC4116-Y
Q605	A6549570	Transistor, Chip 2SA1586-Y
Q608	A6365620	Transistor, Chip 2SC4116-Y
Q609	A6549570	Transistor, Chip 2SA1586-Y
Q611	A6549570	Transistor, Chip 2SA1586-Y
Q623	A6365620	Transistor, Chip 2SC4116-Y
Q624	A6549570	Transistor, Chip 2SA1586-Y
Q625	A6365620	Transistor, Chip 2SC4116-Y
Q626	A6549570	Transistor, Chip 2SA1586-Y
Q963	A6335470	Transistor, Chip 2SC2712-Y
Q964	A6549570	Transistor, Chip 2SA1586-Y
Q965	A6549570	Transistor, Chip 2SA1586-Y
QF001	A6365620	Transistor, Chip 2SC4116-Y
QF002	A6341974	Transistor 2SC2873-Y
QF003	A6341974	Transistor 2SC2873-Y
QF004	A6365620	Transistor, Chip 2SC4116-Y
QF005	A6365620	Transistor, Chip 2SC4116-Y
QL008	A6365620	Transistor, Chip 2SC4116-Y
QL011	A6365620	Transistor, Chip 2SC4116-Y
- DIODES -		
DL011	23118313	Diode, Chip RD6. 2M
DL012	A7150800	Diode, Chip 1SS187
DL013	A7150800	Diode, Chip 1SS187
DL014	A7150800	Diode, Chip 1SS187
DL015	A7150800	Diode, Chip 1SS187
DL016	A7150800	Diode, Chip 1SS187
DL017	A7150800	Diode, Chip 1SS187
DL018	23118313	Diode, Chip RD6. 2M
DL021	23118313	Diode, Chip RD6. 2M
DL022	23118313	Diode, Chip RD6. 2M
DL023	23118313	Diode, Chip RD6. 2M
DL024	23118313	Diode, Chip RD6. 2M
DL025	23118313	Diode, Chip RD6. 2M
DL026	23118313	Diode, Chip RD6. 2M
DL027	23118313	Diode, Chip RD6. 2M
DL028	23118313	Diode, Chip RD6. 2M
DL029	23118313	Diode, Chip RD6. 2M
DL030	23118313	Diode, Chip RD6. 2M
DL031	23118313	Diode, Chip RD6. 2M
DL032	23118313	Diode, Chip RD6. 2M
DL033	23118313	Diode, Chip RD6. 2M
DL034	23118313	Diode, Chip RD6. 2M
DL037	23358535	Diode, LED SPR325MVWMNP
DL038	23358535	Diode, LED SPR325MVWMNP
DL039	23358535	Diode, LED SPR325MVWMNP
DL040	A7150800	Diode, Chip 1SS187
DL041	23118313	Diode, Chip RD6. 2M
DL042	23118313	Diode, Chip RD6. 2M
DL043	23118313	Diode, Chip RD6. 2M
- COILS -		
L301	23103864	Coil, Chip TEM2103T
L302	23103864	Coil, Chip TEM2103T
L303	23103864	Coil, Chip TEM2103T
L401	23245847	Coil, Chip TRF4330CC
L402	23245847	Coil, Chip TRF4330CC
L403	23245847	Coil, Chip TRF4330CC
L404	23245847	Coil, Chip TRF4330CC
L405	23245847	Coil, Chip TRF4330CC
L406	23245847	Coil, Chip TRF4330CC
L407	23245847	Coil, Chip TRF4330CC
L408	23245847	Coil, Chip TRF4330CC
L409	23245847	Coil, Chip TRF4330CC

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
L410	23245847	Coil, Chip	C412	24092399	Cap, Chip
L411	23245847	Coil, Chip	C413	24092178	Cap, Chip
L501	23245847	Coil, Chip	C414	24092441	Cap, Chip
L502	23245847	Coil, Chip	C415	24619101	Cap, Chip
L503	23245847	Coil, Chip	C416	24092399	Cap, Chip
L504	23245847	Coil, Chip	C417	24092399	Cap, Chip
L505	23245847	Coil, Chip	C418	24092178	Cap, Chip
L506	23245847	Coil, Chip	C419	24092538	Cap, Chip
L507	23245847	Coil, Chip	C420	24619102	Cap, Chip
L508	23245847	Coil, Chip	C421	24092441	Cap, Chip
L509	23245847	Coil, Chip	C422	24092441	Cap, Chip
L510	23245847	Coil, Chip	C423	24092399	Cap, Chip
L511	23245847	Coil, Chip	C424	24092399	Cap, Chip
L601	23245847	Coil, Chip	C425	24092441	Cap, Chip
L602	23245847	Coil, Chip	C426	24092441	Cap, Chip
L603	23245847	Coil, Chip	C427	24092441	Cap, Chip
L604	23245847	Coil, Chip	C428	24619106	Cap, Chip
L605	23245847	Coil, Chip	C430	24092399	Cap, Chip
L606	23245847	Coil, Chip	C431	24619106	Cap, Chip
L607	23245847	Coil, Chip	C432	24092294	Cap, Chip
L608	23245847	Coil, Chip	C433	24109103	Cap, Chip
L609	23245847	Coil, Chip	C434	24092538	Cap, Chip
L610	23245847	Coil, Chip	C435	24619096	Cap, Chip
L611	23245847	Coil, Chip	C436	24092538	Cap, Chip
L961	23245847	Coil, Chip	C437	24092538	Cap, Chip
LF001	23103864	Coil, Chip	C438	24092538	Cap, Chip
LF002	23103864	Coil, Chip	C439	24092294	Cap, Chip
- CAPACITORS -			C440	24619106	Cap, Chip
C301	24092538	Cap, Chip	C441	24092538	Cap, Chip
C302	24092399	Cap, Chip	C442	24092538	Cap, Chip
C303	24105101	Cap, Chip	C443	24092538	Cap, Chip
C304	24105101	Cap, Chip	C445	24092399	Cap, Chip
C305	24092538	Cap, Chip	C446	24619106	Cap, Chip
C306	24092399	Cap, Chip	C447	24092294	Cap, Chip
C307	24105101	Cap, Chip	C448	24109103	Cap, Chip
C308	24105101	Cap, Chip	C449	24092538	Cap, Chip
C310	24092538	Cap, Chip	C460	24619096	Cap, Chip
C311	24092399	Cap, Chip	C461	24092538	Cap, Chip
C312	24105100	Cap, Chip	C462	24092538	Cap, Chip
C313	24105101	Cap, Chip	C463	24092538	Cap, Chip
C314	24092538	Cap, Chip	C464	24092294	Cap, Chip
C315	24092399	Cap, Chip	C465	24619106	Cap, Chip
C316	24105101	Cap, Chip	C466	24092538	Cap, Chip
C317	24105100	Cap, Chip	C467	24092538	Cap, Chip
C318	24092538	Cap, Chip	C468	24092538	Cap, Chip
C319	24092399	Cap, Chip	C469	24109103	Cap, Chip
C320	24105101	Cap, Chip	C470	24619106	Cap, Chip
C321	24105101	Cap, Chip	C472	24092294	Cap, Chip
C322	24092538	Cap, Chip	C473	24619106	Cap, Chip
C323	24092399	Cap, Chip	C474	24092399	Cap, Chip
C324	24105101	Cap, Chip	C475	24109103	Cap, Chip
C325	24105101	Cap, Chip	C478	24092538	Cap, Chip
C326	24092538	Cap, Chip	C479	24092538	Cap, Chip
C327	24092399	Cap, Chip	C502	24092515	Cap, Chip
C328	24105101	Cap, Chip	C503	24092399	Cap, Chip
C329	24105101	Cap, Chip	C504	24092178	Cap, Chip
C330	24092538	Cap, Chip	C505	24092441	Cap, Chip
C331	24092399	Cap, Chip	C506	24619101	Cap, Chip
C332	24105101	Cap, Chip	C507	24092399	Cap, Chip
C333	24105101	Cap, Chip	C508	24092399	Cap, Chip
C334	24092538	Cap, Chip	C509	24092178	Cap, Chip
C335	24092399	Cap, Chip	C510	24092538	Cap, Chip
C338	24619097	Cap, Chip	C511	24092515	Cap, Chip
C339	24619106	Cap, Chip	C512	24092399	Cap, Chip
C340	24105101	Cap, Chip	C513	24092178	Cap, Chip
C402	24092515	Cap, Chip	C514	24092441	Cap, Chip
C403	24092399	Cap, Chip	C515	24619101	Cap, Chip
C404	24092178	Cap, Chip	C516	24092399	Cap, Chip
C405	24092441	Cap, Chip	C517	24092399	Cap, Chip
C406	24619101	Cap, Chip	C518	24092178	Cap, Chip
C407	24092399	Cap, Chip	C519	24092538	Cap, Chip
C408	24092399	Cap, Chip	C520	24619102	Cap, Chip
C409	24092178	Cap, Chip	C521	24092441	Cap, Chip
C410	24092538	Cap, Chip	C522	24092441	Cap, Chip
C411	24092515	Cap, Chip	C523	24092399	Cap, Chip

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
C745	24092441	Cap, Chip	1 μ F	Z 16V	CL054	24105101	Cap, Chip	100pF	J 50V
C746	24092538	Cap, Chip	1 μ F	Z 10V	CL055	24105101	Cap, Chip	100pF	J 50V
C747	24092441	Cap, Chip	1 μ F	Z 16V	CL056	24105101	Cap, Chip	100pF	J 50V
C748	24092538	Cap, Chip	1 μ F	Z 10V	CL057	24105101	Cap, Chip	100pF	J 50V
C749	24092441	Cap, Chip	1 μ F	Z 16V	CL058	24105101	Cap, Chip	100pF	J 50V
C750	24092538	Cap, Chip	1 μ F	Z 10V	CL059	24105101	Cap, Chip	100pF	J 50V
C961	24619106	Cap, Chip	33 μ F	M 25V	CL060	24105101	Cap, Chip	100pF	J 50V
C962	24092293	Cap, Chip	0.1 μ F	Z 25V	CL061	24105101	Cap, Chip	100pF	J 50V
C963	24619106	Cap, Chip	33 μ F	M 25V	CL062	24105101	Cap, Chip	100pF	J 50V
C964	24092441	Cap, Chip	1 μ F	Z 16V	CL063	24105101	Cap, Chip	100pF	J 50V
C965	24619106	Cap, Chip	33 μ F	M 25V	CL064	24105101	Cap, Chip	100pF	J 50V
C966	24092293	Cap, Chip	0.1 μ F	Z 25V	CL065	24105101	Cap, Chip	100pF	J 50V
C967	24619106	Cap, Chip	33 μ F	M 25V	CL066	24105101	Cap, Chip	100pF	J 50V
C968	24092441	Cap, Chip	1 μ F	Z 16V	CL067	24105101	Cap, Chip	100pF	J 50V
C969	24092515	Cap, Chip	4.7 μ F	Z 16V	CL068	24105101	Cap, Chip	100pF	J 50V
C970	24092538	Cap, Chip	1 μ F	Z 10V	CL069	24105101	Cap, Chip	100pF	J 50V
C971	24092538	Cap, Chip	1 μ F	Z 10V	CL070	24105101	Cap, Chip	100pF	J 50V
C972	24092538	Cap, Chip	1 μ F	Z 10V	CL071	24105101	Cap, Chip	100pF	J 50V
C973	24619099	Cap, Chip	33 μ F	M 10V	CL072	24105101	Cap, Chip	100pF	J 50V
C974	24092538	Cap, Chip	1 μ F	Z 10V	CL073	24105101	Cap, Chip	100pF	J 50V
C975	24619099	Cap, Chip	33 μ F	M 10V	CL074	24105101	Cap, Chip	100pF	J 50V
C976	24092538	Cap, Chip	1 μ F	Z 10V	CL075	24105101	Cap, Chip	100pF	J 50V
CF005	24619102	Cap, Chip	47 μ F	M 16V	CL076	24100104	Cap, Chip	0.1 μ F	Z 25V
CF006	24619102	Cap, Chip	47 μ F	M 16V	CL077	24619102	Cap, Chip	47 μ F	M 16V
CF009	24619102	Cap, Chip	47 μ F	M 16V	CL078	24100104	Cap, Chip	0.1 μ F	Z 25V
CF010	24619102	Cap, Chip	47 μ F	M 16V	CL079	24619102	Cap, Chip	47 μ F	M 16V
CF013	24105101	Cap, Chip	100pF	J 50V	CL080	24100104	Cap, Chip	0.1 μ F	Z 25V
CF014	24105101	Cap, Chip	100pF	J 50V	CL081	24100104	Cap, Chip	0.1 μ F	Z 25V
CF015	24092441	Cap, Chip	1 μ F	Z 16V	CL082	24619102	Cap, Chip	47 μ F	M 16V
CF016	24092441	Cap, Chip	1 μ F	Z 16V	CL083	24619112	Cap, Chip	0.47 μ F	M 50V
CF017	24619102	Cap, Chip	47 μ F	M 16V	CL084	24100104	Cap, Chip	0.1 μ F	Z 25V
CF018	24619102	Cap, Chip	47 μ F	M 16V	CL085	24100104	Cap, Chip	0.1 μ F	Z 25V
CL011	24105101	Cap, Chip	100pF	J 50V	CL086	24619103	Cap, Chip	4.7 μ F	M 25V
CL012	24105101	Cap, Chip	100pF	J 50V	CL087	24619103	Cap, Chip	4.7 μ F	M 25V
CL013	24105101	Cap, Chip	100pF	J 50V	CL088	24100104	Cap, Chip	0.1 μ F	Z 25V
CL014	24105101	Cap, Chip	100pF	J 50V	CL089	24100104	Cap, Chip	0.1 μ F	Z 25V
CL015	24105101	Cap, Chip	100pF	J 50V	CL090	24100104	Cap, Chip	0.1 μ F	Z 25V
CL016	24105101	Cap, Chip	100pF	J 50V	CL091	24100104	Cap, Chip	0.1 μ F	Z 25V
CL017	24105101	Cap, Chip	100pF	J 50V	CL092	24100104	Cap, Chip	0.1 μ F	Z 25V
CL018	24105101	Cap, Chip	100pF	J 50V	CL093	24619102	Cap, Chip	47 μ F	M 16V
CL019	24105101	Cap, Chip	100pF	J 50V	CL095	24109152	Cap, Chip	1500pF	K 50V
CL020	24105101	Cap, Chip	100pF	J 50V	CL096	24109152	Cap, Chip	1500pF	K 50V
CL021	24105101	Cap, Chip	100pF	J 50V	CL100	24109152	Cap, Chip	1500pF	K 50V
CL022	24105101	Cap, Chip	100pF	J 50V	CL101	24105101	Cap, Chip	100pF	J 50V
CL023	24105101	Cap, Chip	100pF	J 50V	CL102	24105101	Cap, Chip	100pF	J 50V
CL024	24105101	Cap, Chip	100pF	J 50V	CL103	24105101	Cap, Chip	100pF	J 50V
CL025	24105101	Cap, Chip	100pF	J 50V	CL104	24105101	Cap, Chip	100pF	J 50V
CL026	24105101	Cap, Chip	100pF	J 50V	CL105	24105101	Cap, Chip	100pF	J 50V
CL027	24105101	Cap, Chip	100pF	J 50V	CL107	24105101	Cap, Chip	100pF	J 50V
CL028	24105101	Cap, Chip	100pF	J 50V	CL110	24100104	Cap, Chip	0.1 μ F	Z 25V
CL029	24105101	Cap, Chip	100pF	J 50V	CL111	24619103	Cap, Chip	4.7 μ F	M 25V
CL030	24105101	Cap, Chip	100pF	J 50V	CL112	24100104	Cap, Chip	0.1 μ F	Z 25V
CL031	24105101	Cap, Chip	100pF	J 50V	- RESISTORS -				
CL032	24105101	Cap, Chip	100pF	J 50V	R301	24011560	Res, Chip	56 Ω	J 1/20W
CL033	24105101	Cap, Chip	100pF	J 50V	R302	24011560	Res, Chip	56 Ω	J 1/20W
CL034	24105101	Cap, Chip	100pF	J 50V	R303	24011560	Res, Chip	56 Ω	J 1/20W
CL035	24105101	Cap, Chip	100pF	J 50V	R304	24011560	Res, Chip	56 Ω	J 1/20W
CL036	24105101	Cap, Chip	100pF	J 50V	R305	24011560	Res, Chip	56 Ω	J 1/20W
CL037	24105101	Cap, Chip	100pF	J 50V	R306	24011470	Res, Chip	47 Ω	J 1/20W
CL038	24105101	Cap, Chip	100pF	J 50V	R307	24011470	Res, Chip	47 Ω	J 1/20W
CL039	24105101	Cap, Chip	100pF	J 50V	R308	24011560	Res, Chip	56 Ω	J 1/20W
CL040	24105101	Cap, Chip	100pF	J 50V	R309	24011560	Res, Chip	56 Ω	J 1/20W
CL041	24105101	Cap, Chip	100pF	J 50V	R310	24011560	Res, Chip	56 Ω	J 1/20W
CL042	24105101	Cap, Chip	100pF	J 50V	R311	24011560	Res, Chip	56 Ω	J 1/20W
CL043	24105101	Cap, Chip	100pF	J 50V	R312	24011560	Res, Chip	56 Ω	J 1/20W
CL044	24105101	Cap, Chip	100pF	J 50V	R313	24011560	Res, Chip	56 Ω	J 1/20W
CL045	24105101	Cap, Chip	100pF	J 50V	R314	24011560	Res, Chip	56 Ω	J 1/20W
CL046	24105101	Cap, Chip	100pF	J 50V	R315	24011560	Res, Chip	56 Ω	J 1/20W
CL047	24105101	Cap, Chip	100pF	J 50V	R316	24011560	Res, Chip	56 Ω	J 1/20W
CL048	24105101	Cap, Chip	100pF	J 50V	R317	24011560	Res, Chip	56 Ω	J 1/20W
CL049	24105101	Cap, Chip	100pF	J 50V	R318	24011103	Res, Chip	10k Ω	J 1/20W
CL050	24105101	Cap, Chip	100pF	J 50V	R319	24011103	Res, Chip	10k Ω	J 1/20W
CL051	24105101	Cap, Chip	100pF	J 50V	R320	24011103	Res, Chip	10k Ω	J 1/20W
CL052	24105101	Cap, Chip	100pF	J 50V	R321	24011101	Res, Chip	100 Ω	J 1/20W
CL053	24105101	Cap, Chip	100pF	J 50V	R322	24011101	Res, Chip	100 Ω	J 1/20W

LOCATION PART
NUMBER NUMBER DESCRIPTION

R401	24000445	Res, Chip Jumper	0Ω	
R402	24011152	Res, Chip	1.5kΩ	J 1/20W
R403	24011103	Res, Chip	10kΩ	J 1/20W
R404	24011201	Res, Chip	200Ω	J 1/20W
R405	24011510	Res, Chip	51Ω	J 1/20W
R406	24000445	Res, Chip Jumper	0Ω	
R407	24011201	Res, Chip	200Ω	J 1/20W
R408	24011331	Res, Chip	330Ω	J 1/20W
R409	24000445	Res, Chip Jumper	0Ω	
R410	24011152	Res, Chip	1.5kΩ	J 1/20W
R411	24011103	Res, Chip	10kΩ	J 1/20W
R412	24011201	Res, Chip	200Ω	J 1/20W
R413	24011510	Res, Chip	51Ω	J 1/20W
R414	24000445	Res, Chip Jumper	0Ω	
R415	24011201	Res, Chip	200Ω	J 1/20W
R416	24011331	Res, Chip	330Ω	J 1/20W
R417	24011332	Res, Chip	3.3kΩ	J 1/20W
R418	24011391	Res, Chip	390Ω	J 1/20W
R419	24011391	Res, Chip	390Ω	J 1/20W
R420	24011102	Res, Chip	1kΩ	J 1/20W
R421	24011332	Res, Chip	3.3kΩ	J 1/20W
R422	24000824	Chip Jumper		
R423	24000557	Res, Chip	680Ω	F 1/16W
R424	24000557	Res, Chip	680Ω	F 1/16W
R425	24011102	Res, Chip	1kΩ	J 1/20W
R426	24011332	Res, Chip	3.3kΩ	J 1/20W
R427	24000824	Chip Jumper		
R428	24000557	Res, Chip	680Ω	F 1/16W
R429	24000557	Res, Chip	680Ω	F 1/16W
R430	24011101	Res, Chip	100Ω	J 1/20W
R431	24011391	Res, Chip	390Ω	J 1/20W
R432	24011391	Res, Chip	390Ω	J 1/20W
R433	24000445	Res, Chip Jumper	0Ω	
R434	24000445	Res, Chip Jumper	0Ω	
R435	24000445	Res, Chip Jumper	0Ω	
R436	24000445	Res, Chip Jumper	0Ω	
R437	24011100	Res, Chip	10Ω	J 1/20W
R438	24011100	Res, Chip	10Ω	J 1/20W
R439	24011100	Res, Chip	10Ω	J 1/20W
R440	24011223	Res, Chip	22kΩ	J 1/20W
R441	24011100	Res, Chip	10Ω	J 1/20W
R442	24011100	Res, Chip	10Ω	J 1/20W
R443	24011100	Res, Chip	10Ω	J 1/20W
R444	24011100	Res, Chip	10Ω	J 1/20W
R445	24011394	Res, Chip	390kΩ	J 1/20W
R446	24011394	Res, Chip	390kΩ	J 1/20W
R447	24011394	Res, Chip	390kΩ	J 1/20W
R448	24011394	Res, Chip	390kΩ	J 1/20W
R449	24011394	Res, Chip	390kΩ	J 1/20W
R450	24011473	Res, Chip	47kΩ	J 1/20W
R451	24011101	Res, Chip	100Ω	J 1/20W
R452	24011332	Res, Chip	3.3kΩ	J 1/20W
R460	24011394	Res, Chip	390kΩ	J 1/20W
R461	24011100	Res, Chip	10Ω	J 1/20W
R462	24011100	Res, Chip	10Ω	J 1/20W
R463	24011100	Res, Chip	10Ω	J 1/20W
R464	24011100	Res, Chip	10Ω	J 1/20W
R465	24011223	Res, Chip	22kΩ	J 1/20W
R466	24011100	Res, Chip	10Ω	J 1/20W
R467	24011100	Res, Chip	10Ω	J 1/20W
R468	24011100	Res, Chip	10Ω	J 1/20W
R469	24011100	Res, Chip	10Ω	J 1/20W
R470	24011394	Res, Chip	390kΩ	J 1/20W
R471	24011394	Res, Chip	390kΩ	J 1/20W
R472	24011394	Res, Chip	390kΩ	J 1/20W
R473	24011394	Res, Chip	390kΩ	J 1/20W
R474	24011394	Res, Chip	390kΩ	J 1/20W
R475	24011394	Res, Chip	390kΩ	J 1/20W
R476	24011473	Res, Chip	47kΩ	J 1/20W
R477	24011100	Res, Chip	10Ω	J 1/20W
R478	24011102	Res, Chip	1kΩ	J 1/20W
R479	24011102	Res, Chip	1kΩ	J 1/20W
R480	24011102	Res, Chip	1kΩ	J 1/20W
R481	24000445	Res, Chip Jumper	0Ω	
R482	24011183	Res, Chip	18kΩ	J 1/20W

LOCATION PART
NUMBER NUMBER DESCRIPTION

R483	24011472	Res, Chip	4.7kΩ	J 1/20W
R484	24011332	Res, Chip	3.3kΩ	J 1/20W
R487	24000445	Res, Chip Jumper	0Ω	
R488	24000445	Res, Chip Jumper	0Ω	
R493	24011472	Res, Chip	4.7kΩ	J 1/20W
R494	24011332	Res, Chip	3.3kΩ	J 1/20W
R495	24011392	Res, Chip	3.9kΩ	J 1/20W
R496	24011392	Res, Chip	3.9kΩ	J 1/20W
R497	24011103	Res, Chip	10kΩ	J 1/20W
R498	24011102	Res, Chip	1kΩ	J 1/20W
R499	24000445	Res, Chip Jumper	0Ω	
R501	24000445	Res, Chip Jumper	0Ω	
R502	24011152	Res, Chip	1.5kΩ	J 1/20W
R503	24011103	Res, Chip	10kΩ	J 1/20W
R504	24011201	Res, Chip	200Ω	J 1/20W
R505	24011510	Res, Chip	51Ω	J 1/20W
R506	24000445	Res, Chip Jumper	0Ω	
R507	24011201	Res, Chip	200Ω	J 1/20W
R508	24011331	Res, Chip	330Ω	J 1/20W
R509	24000445	Res, Chip Jumper	0Ω	
R510	24011152	Res, Chip	1.5kΩ	J 1/20W
R511	24011103	Res, Chip	10kΩ	J 1/20W
R512	24011201	Res, Chip	200Ω	J 1/20W
R513	24011510	Res, Chip	51Ω	J 1/20W
R514	24000445	Res, Chip Jumper	0Ω	
R515	24011201	Res, Chip	200Ω	J 1/20W
R516	24011331	Res, Chip	330Ω	J 1/20W
R517	24011332	Res, Chip	3.3kΩ	J 1/20W
R518	24011391	Res, Chip	390Ω	J 1/20W
R519	24011391	Res, Chip	390Ω	J 1/20W
R520	24011102	Res, Chip	1kΩ	J 1/20W
R521	24011332	Res, Chip	3.3kΩ	J 1/20W
R522	24000824	Chip Jumper		
R523	24000557	Res, Chip	680Ω	F 1/16W
R524	24000557	Res, Chip	680Ω	F 1/16W
R525	24011102	Res, Chip	1kΩ	J 1/20W
R526	24011332	Res, Chip	3.3kΩ	J 1/20W
R527	24000824	Chip Jumper		
R528	24000557	Res, Chip	680Ω	F 1/16W
R529	24000557	Res, Chip	680Ω	F 1/16W
R530	24011101	Res, Chip	100Ω	J 1/20W
R531	24011391	Res, Chip	390Ω	J 1/20W
R532	24011391	Res, Chip	390Ω	J 1/20W
R533	24000445	Res, Chip Jumper	0Ω	
R534	24000445	Res, Chip Jumper	0Ω	
R535	24000445	Res, Chip Jumper	0Ω	
R536	24000445	Res, Chip Jumper	0Ω	
R537	24011100	Res, Chip	10Ω	J 1/20W
R538	24011100	Res, Chip	10Ω	J 1/20W
R539	24011100	Res, Chip	10Ω	J 1/20W
R540	24011223	Res, Chip	22kΩ	J 1/20W
R541	24011100	Res, Chip	10Ω	J 1/20W
R542	24011100	Res, Chip	10Ω	J 1/20W
R543	24011100	Res, Chip	10Ω	J 1/20W
R544	24011100	Res, Chip	10Ω	J 1/20W
R545	24011394	Res, Chip	390kΩ	J 1/20W
R546	24011394	Res, Chip	390kΩ	J 1/20W
R547	24011394	Res, Chip	390kΩ	J 1/20W
R548	24011394	Res, Chip	390kΩ	J 1/20W
R549	24011394	Res, Chip	390kΩ	J 1/20W
R550	24011473	Res, Chip	47kΩ	J 1/20W
R551	24011101	Res, Chip	100Ω	J 1/20W
R552	24011332	Res, Chip	3.3kΩ	J 1/20W
R553	24011472	Res, Chip	4.7kΩ	J 1/20W
R554	24011472	Res, Chip	4.7kΩ	J 1/20W
R555	24011153	Res, Chip	15kΩ	J 1/20W
R556	24011472	Res, Chip	4.7kΩ	J 1/20W
R557	24011472	Res, Chip	4.7kΩ	J 1/20W
R558	24011153	Res, Chip	15kΩ	J 1/20W
R560	24011394	Res, Chip	390kΩ	J 1/20W
R561	24011100	Res, Chip	10Ω	J 1/20W
R562	24011100	Res, Chip	10Ω	J 1/20W
R563	24011100	Res, Chip	10Ω	J 1/20W
R564	24011100	Res, Chip	10Ω	J 1/20W
R565	24011223	Res, Chip	22kΩ	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
R566	24011100	Res, Chip	10Ω	J 1/20W	R646	24011394	Res, Chip	390kΩ	J 1/20W
R567	24011100	Res, Chip	10Ω	J 1/20W	R647	24011394	Res, Chip	390kΩ	J 1/20W
R568	24011100	Res, Chip	10Ω	J 1/20W	R648	24011394	Res, Chip	390kΩ	J 1/20W
R569	24011100	Res, Chip	10Ω	J 1/20W	R649	24011394	Res, Chip	390kΩ	J 1/20W
R570	24011394	Res, Chip	390kΩ	J 1/20W	R650	24011473	Res, Chip	47kΩ	J 1/20W
R571	24011394	Res, Chip	390kΩ	J 1/20W	R651	24011101	Res, Chip	100Ω	J 1/20W
R572	24011394	Res, Chip	390kΩ	J 1/20W	R652	24011332	Res, Chip	3.3kΩ	J 1/20W
R573	24011394	Res, Chip	390kΩ	J 1/20W	R660	24011394	Res, Chip	390kΩ	J 1/20W
R574	24011394	Res, Chip	390kΩ	J 1/20W	R661	24011100	Res, Chip	10Ω	J 1/20W
R575	24011394	Res, Chip	390kΩ	J 1/20W	R662	24011100	Res, Chip	10Ω	J 1/20W
R576	24011473	Res, Chip	47kΩ	J 1/20W	R663	24011100	Res, Chip	10Ω	J 1/20W
R577	24011100	Res, Chip	10Ω	J 1/20W	R664	24011100	Res, Chip	10Ω	J 1/20W
R578	24011102	Res, Chip	1kΩ	J 1/20W	R665	24011223	Res, Chip	22kΩ	J 1/20W
R579	24011102	Res, Chip	1kΩ	J 1/20W	R666	24011100	Res, Chip	10Ω	J 1/20W
R580	24011102	Res, Chip	1kΩ	J 1/20W	R667	24011100	Res, Chip	10Ω	J 1/20W
R581	24000445	Res, Chip Jumper	0Ω		R668	24011100	Res, Chip	10Ω	J 1/20W
R582	24011183	Res, Chip	18kΩ	J 1/20W	R669	24011100	Res, Chip	10Ω	J 1/20W
R583	24011472	Res, Chip	4.7kΩ	J 1/20W	R670	24011394	Res, Chip	390kΩ	J 1/20W
R584	24011332	Res, Chip	3.3kΩ	J 1/20W	R671	24011394	Res, Chip	390kΩ	J 1/20W
R585	24000445	Res, Chip Jumper	0Ω		R672	24011394	Res, Chip	390kΩ	J 1/20W
R586	24000445	Res, Chip Jumper	0Ω		R673	24011394	Res, Chip	390kΩ	J 1/20W
R587	24000445	Res, Chip Jumper	0Ω		R674	24011394	Res, Chip	390kΩ	J 1/20W
R588	24000445	Res, Chip Jumper	0Ω		R675	24011394	Res, Chip	390kΩ	J 1/20W
R593	24011472	Res, Chip	4.7kΩ	J 1/20W	R676	24011473	Res, Chip	47kΩ	J 1/20W
R594	24011332	Res, Chip	3.3kΩ	J 1/20W	R677	24011100	Res, Chip	10Ω	J 1/20W
R595	24011392	Res, Chip	3.9kΩ	J 1/20W	R678	24011102	Res, Chip	1kΩ	J 1/20W
R596	24011392	Res, Chip	3.9kΩ	J 1/20W	R679	24011102	Res, Chip	1kΩ	J 1/20W
R597	24011103	Res, Chip	10kΩ	J 1/20W	R680	24011102	Res, Chip	1kΩ	J 1/20W
R598	24011102	Res, Chip	1kΩ	J 1/20W	R681	24000445	Res, Chip Jumper	0Ω	
R599	24000445	Res, Chip Jumper	0Ω		R682	24011183	Res, Chip	18kΩ	J 1/20W
R601	24000445	Res, Chip Jumper	0Ω		R683	24011472	Res, Chip	4.7kΩ	J 1/20W
R602	24011152	Res, Chip	1.5kΩ	J 1/20W	R684	24011332	Res, Chip	3.3kΩ	J 1/20W
R603	24011103	Res, Chip	10kΩ	J 1/20W	R687	24000445	Res, Chip Jumper	0Ω	
R604	24011201	Res, Chip	200Ω	J 1/20W	R688	24000445	Res, Chip Jumper	0Ω	
R605	24011510	Res, Chip	51Ω	J 1/20W	R693	24011472	Res, Chip	4.7kΩ	J 1/20W
R606	24000445	Res, Chip Jumper	0Ω		R694	24011332	Res, Chip	3.3kΩ	J 1/20W
R607	24011201	Res, Chip	200Ω	J 1/20W	R695	24011392	Res, Chip	3.9kΩ	J 1/20W
R608	24011331	Res, Chip	330Ω	J 1/20W	R696	24011392	Res, Chip	3.9kΩ	J 1/20W
R609	24000445	Res, Chip Jumper	0Ω		R697	24011103	Res, Chip	10kΩ	J 1/20W
R610	24011152	Res, Chip	1.5kΩ	J 1/20W	R698	24011102	Res, Chip	1kΩ	J 1/20W
R611	24011103	Res, Chip	10kΩ	J 1/20W	R699	24000445	Res, Chip Jumper	0Ω	
R612	24011201	Res, Chip	200Ω	J 1/20W	R701	24011101	Res, Chip	100Ω	J 1/20W
R613	24011510	Res, Chip	51Ω	J 1/20W	R702	24011101	Res, Chip	100Ω	J 1/20W
R614	24000445	Res, Chip Jumper	0Ω		R703	24011101	Res, Chip	100Ω	J 1/20W
R615	24011201	Res, Chip	200Ω	J 1/20W	R704	24011101	Res, Chip	100Ω	J 1/20W
R616	24011331	Res, Chip	330Ω	J 1/20W	R705	24011101	Res, Chip	100Ω	J 1/20W
R617	24011332	Res, Chip	3.3kΩ	J 1/20W	R706	24011101	Res, Chip	100Ω	J 1/20W
R618	24011391	Res, Chip	390Ω	J 1/20W	R707	24011101	Res, Chip	100Ω	J 1/20W
R619	24011391	Res, Chip	390Ω	J 1/20W	R708	24011101	Res, Chip	100Ω	J 1/20W
R620	24011102	Res, Chip	1kΩ	J 1/20W	R709	24011101	Res, Chip	100Ω	J 1/20W
R621	24011332	Res, Chip	3.3kΩ	J 1/20W	R710	24011101	Res, Chip	100Ω	J 1/20W
R622	24000824	Chip Jumper			R711	24011101	Res, Chip	100Ω	J 1/20W
R623	24000557	Res, Chip	680Ω	F 1/16W	R712	24011101	Res, Chip	100Ω	J 1/20W
R624	24000557	Res, Chip	680Ω	F 1/16W	R713	24011101	Res, Chip	100Ω	J 1/20W
R625	24011102	Res, Chip	1kΩ	J 1/20W	R714	24011101	Res, Chip	100Ω	J 1/20W
R626	24011332	Res, Chip	3.3kΩ	J 1/20W	R715	24011101	Res, Chip	100Ω	J 1/20W
R627	24000824	Chip Jumper			R716	24011101	Res, Chip	100Ω	J 1/20W
R628	24000557	Res, Chip	680Ω	F 1/16W	R717	24011101	Res, Chip	100Ω	J 1/20W
R629	24000557	Res, Chip	680Ω	F 1/16W	R718	24011101	Res, Chip	100Ω	J 1/20W
R630	24011101	Res, Chip	100Ω	J 1/20W	R719	24011101	Res, Chip	100Ω	J 1/20W
R631	24011391	Res, Chip	390Ω	J 1/20W	R720	24011101	Res, Chip	100Ω	J 1/20W
R632	24011391	Res, Chip	390Ω	J 1/20W	R721	24011101	Res, Chip	100Ω	J 1/20W
R633	24000445	Res, Chip Jumper	0Ω		R722	24011101	Res, Chip	100Ω	J 1/20W
R634	24000445	Res, Chip Jumper	0Ω		R723	24011101	Res, Chip	100Ω	J 1/20W
R635	24000445	Res, Chip Jumper	0Ω		R724	24011101	Res, Chip	100Ω	J 1/20W
R636	24000445	Res, Chip Jumper	0Ω		R725	24011101	Res, Chip	100Ω	J 1/20W
R637	24011100	Res, Chip	10Ω	J 1/20W	R726	24011101	Res, Chip	100Ω	J 1/20W
R638	24011100	Res, Chip	10Ω	J 1/20W	R727	24011101	Res, Chip	100Ω	J 1/20W
R639	24011100	Res, Chip	10Ω	J 1/20W	R728	24011101	Res, Chip	100Ω	J 1/20W
R640	24011223	Res, Chip	22kΩ	J 1/20W	R729	24011101	Res, Chip	100Ω	J 1/20W
R641	24011100	Res, Chip	10Ω	J 1/20W	R730	24011101	Res, Chip	100Ω	J 1/20W
R642	24011100	Res, Chip	10Ω	J 1/20W	R731	24011101	Res, Chip	100Ω	J 1/20W
R643	24011100	Res, Chip	10Ω	J 1/20W	R732	24011101	Res, Chip	100Ω	J 1/20W
R644	24011100	Res, Chip	10Ω	J 1/20W	R733	24011101	Res, Chip	100Ω	J 1/20W
R645	24011394	Res, Chip	390kΩ	J 1/20W	R734	24011101	Res, Chip	100Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RL120	24011102	Res, Chip	1kΩ	J 1/20W
RL121	24011102	Res, Chip	1kΩ	J 1/20W
RL123	24011102	Res, Chip	1kΩ	J 1/20W
RL125	24011103	Res, Chip	10kΩ	J 1/20W
RL126	24011103	Res, Chip	10kΩ	J 1/20W
RL127	24011103	Res, Chip	10kΩ	J 1/20W
RL128	24011103	Res, Chip	10kΩ	J 1/20W
RL129	24011103	Res, Chip	10kΩ	J 1/20W
RL131	24011103	Res, Chip	10kΩ	J 1/20W
RL140	24011472	Res, Chip	4.7kΩ	J 1/20W
RL141	24011104	Res, Chip	100kΩ	J 1/20W
RL142	24011102	Res, Chip	1kΩ	J 1/20W
RL143	24011202	Res, Chip	2kΩ	J 1/20W
RL144	24011302	Res, Chip	3kΩ	J 1/20W
RL145	24011474	Res, Chip	470kΩ	J 1/20W
- MISCELLANEOUS -				
J501A	23969946	Tape		
JF02A	23969946	Tape		
JL01A	23969946	Tape		
JL99A	23969946	Tape		
P301	23903046	Socket	1mm, 50P	
P401	23903051	Socket	FPC/FFC	
P501	23903051	Socket	FPC/FFC	
P601	23903051	Socket	FPC/FFC	
PL003	70164729	Plug	3P, 1.25mm	
PL004	23903049	Socket	FPC/FFC	
PL006	23368674	Plug	2P	
PL009	23368675	Plug	3P	
PL010	23903053	Socket	FPC/FFC	
SL001	23344088	Push Switch		
SL002	23344088	Push Switch		
SL003	23344088	Push Switch		
SL004	23344088	Push Switch		
SL005	23344088	Push Switch		
SL006	23344088	Push Switch		
SL007	23344088	Push Switch		
SL008	23344088	Push Switch		
XL001	23153752	Crystal		
Z951	23118367	IC Protector	ICP-N25	
ZF001	A8662610	Photo Interrupter	TLP121	
ZF002	A8662610	Photo Interrupter	TLP121	
ZL005	23144597	Thermal Lead	OHD5D-100B	
■U0015	23781069	PC Board Assy	F-REM	
- DIODES -				
DL301	23118313	Diode, Chip	RD6. 2M	
DL302	23118313	Diode, Chip	RD6. 2M	
- CAPACITORS -				
CL301	24619102	Cap, Chip	47μF	M 16V
- RESISTORS -				
RF030	24019424			
RL301	24011101	Res, Chip	100Ω	J 1/20W
- MISCELLANEOUS -				
ZL301	23904946	Photo Reciever	RPM-676CBR-S	
■U002	23781070	PC Board Assy	Digital	
- INTEGRATED CIRCUITS -				
QX001	A6030107	IC	TC7S14F	
QX002	A6030620	IC	TC7S04F	
QX003	23906210	IC	CD0016AM	
QX004	B0638318	IC	TC160G54AF-1	
QX008	23905013	IC	TLC2932	
QX009	23906227	IC	EPM7160TLP51	
QX011	23906234	IC	M62320FP	
QX012	23906234	IC	M62320FP	
QX017	A6030640	IC	TC7S32F	
QX018	70129738	IC	PQ20VZ1U	
QX019	70129738	IC	PQ20VZ1U	
QX020	70129738	IC	PQ20VZ1U	
QX021	70129738	IC	PQ20VZ1U	
QX028	23906218	IC	CXA3106Q	
QX029	23905013	IC	TLC2932	
QX030	A6030107	IC	TC7S14F	
QX031	A6030107	IC	TC7S14F	
QX032	70129738	IC	PQ20VZ1U	

LOCATION NUMBER	PART NUMBER	DESCRIPTION	
QX033	70129738	IC	PQ20VZ1U
QX034	70129738	IC	PQ20VZ1U
QX035	70200430	IC	RN5VD27A
QX036	A6030620	IC	TC7S04F
QX037	A6030630	IC	TC7S08F
QX038	A6030630	IC	TC7S08F
QX201	23906219	IC	CXA3026Q
QX202	23906235	IC	MB814265-60
QX203	23906235	IC	MB814265-60
QX204	B0508347	IC	TC203E2651AF
QX205	23906235	IC	MB814265-60
QX206	23906235	IC	MB814265-60
QX207	23906228	IC	EPM7064TLP51
QX208	23906221	IC	MB40950PFQ
QX401	23906219	IC	CXA3026Q
QX402	23906235	IC	MB814265-60
QX403	23906235	IC	MB814265-60
QX404	B0508347	IC	TC203E2651AF
QX405	23906235	IC	MB814265-60
QX406	23906235	IC	MB814265-60
QX407	23906228	IC	EPM7064TLP51
QX408	23906221	IC	MB40950PFQ
QX601	23906219	IC	CXA3026Q
QX602	23906235	IC	MB814265-60
QX603	23906235	IC	MB814265-60
QX604	B0508347	IC	TC203E2651AF
QX605	23906235	IC	MB814265-60
QX606	23906235	IC	MB814265-60
QX607	23906228	IC	EPM7064TLP51
QX608	23906221	IC	MB40950PFQ
- TRANSISTORS -			
QX022	A6549570	Transistor, Chip	2SA1586-Y
QX023	A6335470	Transistor, Chip	2SC2712-Y
QX024	A6335470	Transistor, Chip	2SC2712-Y
QX025	A6365620	Transistor, Chip	2SC4116-Y
QX026	A6541130	Transistor, Chip	2SA1162-Y
QX027	A6541130	Transistor, Chip	2SA1162-Y
QX209	A6365620	Transistor, Chip	2SC4116-Y
QX210	A6365620	Transistor, Chip	2SC4116-Y
QX409	A6365620	Transistor, Chip	2SC4116-Y
QX410	A6365620	Transistor, Chip	2SC4116-Y
QX609	A6365620	Transistor, Chip	2SC4116-Y
QX610	A6365620	Transistor, Chip	2SC4116-Y
- DIODES -			
DX001	A7150800	Diode, Chip	1SS187
DX002	23118313	Diode, Chip	RD6. 2M
- COILS -			
LX003	23103793	Coil, Chip	MMZ2012S121A
LX004	23103793	Coil, Chip	MMZ2012S121A
LX005	23103793	Coil, Chip	MMZ2012S121A
LX007	23103793	Coil, Chip	MMZ2012S121A
LX008	23103793	Coil, Chip	MMZ2012S121A
LX009	23103880	Coil, Choke	TEM2011Y
LX010	23103793	Coil, Chip	MMZ2012S121A
LX011	23103793	Coil, Chip	MMZ2012S121A
LX012	23103793	Coil, Chip	MMZ2012S121A
LX013	23103880	Coil, Choke	TEM2011Y
LX014	23103793	Coil, Chip	MMZ2012S121A
LX015	23103793	Coil, Chip	MMZ2012S121A
LX016	23103793	Coil, Chip	MMZ2012S121A
LX017	23103793	Coil, Chip	MMZ2012S121A
LX018	23103793	Coil, Chip	MMZ2012S121A
LX019	23103793	Coil, Chip	MMZ2012S121A
LX020	23103793	Coil, Chip	MMZ2012S121A
LX201	23103793	Coil, Chip	MMZ2012S121A
LX202	23103793	Coil, Chip	MMZ2012S121A
LX203	23103793	Coil, Chip	MMZ2012S121A
LX204	23103793	Coil, Chip	MMZ2012S121A
LX401	23103793	Coil, Chip	MMZ2012S121A
LX402	23103793	Coil, Chip	MMZ2012S121A
LX403	23103793	Coil, Chip	MMZ2012S121A
LX404	23103793	Coil, Chip	MMZ2012S121A
LX601	23103793	Coil, Chip	MMZ2012S121A
LX602	23103793	Coil, Chip	MMZ2012S121A
LX603	23103793	Coil, Chip	MMZ2012S121A

CX206	24092538	Cap, Chip	1μF	Z 10V
CX207	24092538	Cap, Chip	1μF	Z 10V
CX208	24092538	Cap, Chip	1μF	Z 10V
CX209	24092538	Cap, Chip	1μF	Z 10V
CX210	24088079	Cap, Chip	10μF	M 10V
CX211	24092538	Cap, Chip	1μF	Z 10V
CX212	24092538	Cap, Chip	1μF	Z 10V
CX213	24092538	Cap, Chip	1μF	Z 10V
CX214	24092538	Cap, Chip	1μF	Z 10V
CX215	24092538	Cap, Chip	1μF	Z 10V
CX216	24092538	Cap, Chip	1μF	Z 10V
CX217	24092538	Cap, Chip	1μF	Z 10V
CX218	24092538	Cap, Chip	1μF	Z 10V
CX219	24092538	Cap, Chip	1μF	Z 10V
CX220	24092538	Cap, Chip	1μF	Z 10V
CX221	24092538	Cap, Chip	1μF	Z 10V
CX222	24092538	Cap, Chip	1μF	Z 10V
CX223	24092538	Cap, Chip	1μF	Z 10V
CX224	24092538	Cap, Chip	1μF	Z 10V
CX225	24092538	Cap, Chip	1μF	Z 10V
CX226	24092538	Cap, Chip	1μF	Z 10V
CX227	24092538	Cap, Chip	1μF	Z 10V
CX228	24092538	Cap, Chip	1μF	Z 10V
CX229	24092538	Cap, Chip	1μF	Z 10V
CX230	24092538	Cap, Chip	1μF	Z 10V
CX231	24092538	Cap, Chip	1μF	Z 10V
CX232	24092538	Cap, Chip	1μF	Z 10V
CX233	24092538	Cap, Chip	1μF	Z 10V
CX234	24092538	Cap, Chip	1μF	Z 10V
CX235	24092538	Cap, Chip	1μF	Z 10V
CX236	24092538	Cap, Chip	1μF	Z 10V
CX237	24092538	Cap, Chip	1μF	Z 10V
CX238	24092538	Cap, Chip	1μF	Z 10V
CX239	24092538	Cap, Chip	1μF	Z 10V
CX240	24092538	Cap, Chip	1μF	Z 10V
CX241	24092538	Cap, Chip	1μF	Z 10V
CX242	24092538	Cap, Chip	1μF	Z 10V
CX243	24092538	Cap, Chip	1μF	Z 10V
CX244	24092538	Cap, Chip	1μF	Z 10V
CX245	24092538	Cap, Chip	1μF	Z 10V
CX246	24088079	Cap, Chip	10μF	M 10V
CX247	24092538	Cap, Chip	1μF	Z 10V
CX248	24092538	Cap, Chip	1μF	Z 10V
CX249	24092538	Cap, Chip	1μF	Z 10V
CX250	24092538	Cap, Chip	1μF	Z 10V
CX251	24092538	Cap, Chip	1μF	Z 10V
CX252	24092399	Cap, Chip	0.1μF	Z 16V
CX257	24092538	Cap, Chip	1μF	Z 10V
CX401	24088079	Cap, Chip	10μF	M 10V
CX402	24092538	Cap, Chip	1μF	Z 10V
CX403	24092538	Cap, Chip	1μF	Z 10V
CX404	24092538	Cap, Chip	1μF	Z 10V
CX405	24088079	Cap, Chip	10μF	M 10V
CX406	24092538	Cap, Chip	1μF	Z 10V
CX407	24092538	Cap, Chip	1μF	Z 10V
CX408	24092538	Cap, Chip	1μF	Z 10V
CX409	24092538	Cap, Chip	1μF	Z 10V
CX410	24088079	Cap, Chip	10μF	M 10V
CX411	24092538	Cap, Chip	1μF	Z 10V
CX412	24092538	Cap, Chip	1μF	Z 10V
CX413	24092538	Cap, Chip	1μF	Z 10V
CX414	24092538	Cap, Chip	1μF	Z 10V
CX415	24092538	Cap, Chip	1μF	Z 10V
CX416	24092538	Cap, Chip	1μF	Z 10V
CX417	24092538	Cap, Chip	1μF	Z 10V
CX418	24092538	Cap, Chip	1μF	Z 10V
CX419	24092538	Cap, Chip	1μF	Z 10V
CX420	24092538	Cap, Chip	1μF	Z 10V
CX421	24092538	Cap, Chip	1μF	Z 10V
CX422	24092538	Cap, Chip	1μF	Z 10V
CX423	24092538	Cap, Chip	1μF	Z 10V
CX424	24092538	Cap, Chip	1μF	Z 10V
CX425	24092538	Cap, Chip	1μF	Z 10V
CX426	24092538	Cap, Chip	1μF	Z 10V
CX427	24092538	Cap, Chip	1μF	Z 10V

[illegible]

CX650	24092538	Cap, Chip	1 μ F	Z 10V
CX651	24092538	Cap, Chip	1 μ F	Z 10V
CX652	24092399	Cap, Chip	0.1 μ F	Z 16V
CX657	24092538	Cap, Chip	1 μ F	Z 10V
- RESISTORS -				
RX004	24011473	Res, Chip	47k Ω	J 1/20W
RX012	24011470	Res, Chip	47 Ω	J 1/20W
RX013	24011153	Res, Chip	15k Ω	J 1/20W
RX014	24011331	Res, Chip	330 Ω	J 1/20W
RX015	24011332	Res, Chip	3.3k Ω	J 1/20W
RX016	24011470	Res, Chip	47 Ω	J 1/20W
RX017	24011470	Res, Chip	47 Ω	J 1/20W
RX018	24011101	Res, Chip	100 Ω	J 1/20W
RX019	24011101	Res, Chip	100 Ω	J 1/20W
RX021	24011470	Res, Chip	47 Ω	J 1/20W
RX022	24011470	Res, Chip	47 Ω	J 1/20W
RX023	24011470	Res, Chip	47 Ω	J 1/20W
RX024	24011470	Res, Chip	47 Ω	J 1/20W
RX025	24011470	Res, Chip	47 Ω	J 1/20W
RX026	24011470	Res, Chip	47 Ω	J 1/20W
RX027	24011470	Res, Chip	47 Ω	J 1/20W
RX028	24011470	Res, Chip	47 Ω	J 1/20W
RX029	24011470	Res, Chip	47 Ω	J 1/20W
RX030	24011470	Res, Chip	47 Ω	J 1/20W
RX031	24011470	Res, Chip	47 Ω	J 1/20W
RX032	24011470	Res, Chip	47 Ω	J 1/20W
RX033	24011470	Res, Chip	47 Ω	J 1/20W
RX034	24011470	Res, Chip	47 Ω	J 1/20W
RX035	24011470	Res, Chip	47 Ω	J 1/20W
RX036	24011470	Res, Chip	47 Ω	J 1/20W
RX037	24011470	Res, Chip	47 Ω	J 1/20W
RX038	24011470	Res, Chip	47 Ω	J 1/20W
RX039	24011470	Res, Chip	47 Ω	J 1/20W
RX040	24011470	Res, Chip	47 Ω	J 1/20W
RX041	24011470	Res, Chip	47 Ω	J 1/20W
RX045	24011470	Res, Chip	47 Ω	J 1/20W
RX046	24011470	Res, Chip	47 Ω	J 1/20W
RX047	24011100	Res, Chip	10 Ω	J 1/20W
RX049	24011102	Res, Chip	1k Ω	J 1/20W
RX050	24011101	Res, Chip	100 Ω	J 1/20W
RX051	24011101	Res, Chip	100 Ω	J 1/20W
RX052	24011101	Res, Chip	100 Ω	J 1/20W
RX053	24011470	Res, Chip	47 Ω	J 1/20W
RX054	24011470	Res, Chip	47 Ω	J 1/20W
RX055	24011470	Res, Chip	47 Ω	J 1/20W
RX056	24011470	Res, Chip	47 Ω	J 1/20W
RX057	24011101	Res, Chip	100 Ω	J 1/20W
RX058	24872101	Res, Chip	100 Ω	J 1/16W
RX059	24011302	Res, Chip	3k Ω	J 1/20W
RX060	24011102	Res, Chip	1k Ω	J 1/20W
RX061	24011302	Res, Chip	3k Ω	J 1/20W
RX062	24011102	Res, Chip	1k Ω	J 1/20W
RX063	24011302	Res, Chip	3k Ω	J 1/20W
RX064	24011102	Res, Chip	1k Ω	J 1/20W
RX065	24011152	Res, Chip	1.5k Ω	J 1/20W
RX066	24011102	Res, Chip	1k Ω	J 1/20W
RX067	24011101	Res, Chip	100 Ω	J 1/20W
RX068	24011101	Res, Chip	100 Ω	J 1/20W
RX069	24011101	Res, Chip	100 Ω	J 1/20W
RX070	24011101	Res, Chip	100 Ω	J 1/20W
RX071	24011101	Res, Chip	100 Ω	J 1/20W
RX072	24011101	Res, Chip	100 Ω	J 1/20W
RX073	24011101	Res, Chip	100 Ω	J 1/20W
RX074	24011101	Res, Chip	100 Ω	J 1/20W
RX075	24011101	Res, Chip	100 Ω	J 1/20W
RX076	24011101	Res, Chip	100 Ω	J 1/20W
RX077	24011101	Res, Chip	100 Ω	J 1/20W
RX078	24011101	Res, Chip	100 Ω	J 1/20W
RX079	24011101	Res, Chip	100 Ω	J 1/20W
RX080	24011470	Res, Chip	47 Ω	J 1/20W
RX081	24011470	Res, Chip	47 Ω	J 1/20W</

LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RX086	24011101	Res, Chip	100Ω	J 1/20W
RX087	24011101	Res, Chip	100Ω	J 1/20W
RX088	24011101	Res, Chip	100Ω	J 1/20W
RX089	24011101	Res, Chip	100Ω	J 1/20W
RX090	24011101	Res, Chip	100Ω	J 1/20W
RX091	24011101	Res, Chip	100Ω	J 1/20W
RX092	24011470	Res, Chip	47Ω	J 1/20W
RX094	24011151	Res, Chip	150Ω	J 1/20W
RX096	24011561	Res, Chip	560Ω	J 1/20W
RX097	24011100	Res, Chip	10Ω	J 1/20W
RX098	24011100	Res, Chip	10Ω	J 1/20W
RX099	24011221	Res, Chip	220Ω	J 1/20W
RX100	24011221	Res, Chip	220Ω	J 1/20W
RX101	24011221	Res, Chip	220Ω	J 1/20W
RX102	24011470	Res, Chip	47Ω	J 1/20W
RX103	24011470	Res, Chip	47Ω	J 1/20W
RX104	24011911	Res, Chip	910Ω	J 1/20W
RX105	24011472	Res, Chip	4.7kΩ	J 1/20W
RX106	24011302	Res, Chip	3kΩ	J 1/20W
RX107	24011202	Res, Chip	2kΩ	J 1/20W
RX108	24011100	Res, Chip	10Ω	J 1/20W
RX109	24011104	Res, Chip	100kΩ	J 1/20W
RX110	24011332	Res, Chip	3.3kΩ	J 1/20W
RX111	24000424	Res, Chip	1.6kΩ	F 1/16W
RX112	24011470	Res, Chip	47Ω	J 1/20W
RX113	24011332	Res, Chip	3.3kΩ	J 1/20W
RX114	24011331	Res, Chip	330Ω	J 1/20W
RX115	24011331	Res, Chip	330Ω	J 1/20W
RX116	24011470	Res, Chip	47Ω	J 1/20W
RX117	24011103	Res, Chip	10kΩ	J 1/20W
RX119	24011470	Res, Chip	47Ω	J 1/20W
RX120	24011152	Res, Chip	1.5kΩ	J 1/20W
RX121	24011102	Res, Chip	1kΩ	J 1/20W
RX122	24011302	Res, Chip	3kΩ	J 1/20W
RX123	24011102	Res, Chip	1kΩ	J 1/20W
RX124	24011302	Res, Chip	3kΩ	J 1/20W
RX125	24011102	Res, Chip	1kΩ	J 1/20W
RX126	24011561	Res, Chip	560Ω	J 1/20W
RX127	24011561	Res, Chip	560Ω	J 1/20W
RX128	24011470	Res, Chip	47Ω	J 1/20W
RX133	24011102	Res, Chip	1kΩ	J 1/20W
RX201	24011470	Res, Chip	47Ω	J 1/20W
RX204	24011221	Res, Chip	220Ω	J 1/20W
RX205	24011221	Res, Chip	220Ω	J 1/20W
RX206	24011103	Res, Chip	10kΩ	J 1/20W
RX207	24011103	Res, Chip	10kΩ	J 1/20W
RX208	24011103	Res, Chip	10kΩ	J 1/20W
RX209	24011103	Res, Chip	10kΩ	J 1/20W
RX210	24011103	Res, Chip	10kΩ	J 1/20W
RX211	24011103	Res, Chip	10kΩ	J 1/20W
RX212	24011103	Res, Chip	10kΩ	J 1/20W
RX213	24011103	Res, Chip	10kΩ	J 1/20W
RX214	24011103	Res, Chip	10kΩ	J 1/20W
RX215	24011103	Res, Chip	10kΩ	J 1/20W
RX216	24011103	Res, Chip	10kΩ	J 1/20W
RX219	24011103	Res, Chip	10kΩ	J 1/20W
RX220	24011221	Res, Chip	220Ω	J 1/20W
RX221	24011221	Res, Chip	220Ω	J 1/20W
RX222	24011102	Res, Chip	1kΩ	J 1/20W
RX223	24011102	Res, Chip	1kΩ	J 1/20W
RX224	24011102	Res, Chip	1kΩ	J 1/20W
RX225	24011102	Res, Chip	1kΩ	J 1/20W
RX401	24011470	Res, Chip	47Ω	J 1/20W
RX406	24011103	Res, Chip	10kΩ	J 1/20W
RX407	24011103	Res, Chip	10kΩ	J 1/20W
RX408	24011103	Res, Chip	10kΩ	J 1/20W
RX409	24011103	Res, Chip	10kΩ	J 1/20W
RX410	24011103	Res, Chip	10kΩ	J 1/20W
RX411	24011103	Res, Chip	10kΩ	J 1/20W
RX412	24011103	Res, Chip	10kΩ	J 1/20W
RX413	24011103	Res, Chip	10kΩ	J 1/20W
RX414	24011103	Res, Chip	10kΩ	J 1/20W
RX415	24011103	Res, Chip	10kΩ	J 1/20W
RX416	24011103	Res, Chip	10kΩ	J 1

LOCATION NUMBER	PART NUMBER	DESCRIPTION			
RX422	24011102	Res, Chip	1kΩ	J 1/20W	
RX423	24011102	Res, Chip	1kΩ	J 1/20W	
RX424	24011102	Res, Chip	1kΩ	J 1/20W	
RX425	24011102	Res, Chip	1kΩ	J 1/20W	
RX601	24011470	Res, Chip	47Ω	J 1/20W	
RX606	24011103	Res, Chip	10kΩ	J 1/20W	
RX607	24011103	Res, Chip	10kΩ	J 1/20W	
RX608	24011103	Res, Chip	10kΩ	J 1/20W	
RX609	24011103	Res, Chip	10kΩ	J 1/20W	
RX610	24011103	Res, Chip	10kΩ	J 1/20W	
RX611	24011103	Res, Chip	10kΩ	J 1/20W	
RX612	24011103	Res, Chip	10kΩ	J 1/20W	
RX613	24011103	Res, Chip	10kΩ	J 1/20W	
RX614	24011103	Res, Chip	10kΩ	J 1/20W	
RX615	24011103	Res, Chip	10kΩ	J 1/20W	
RX616	24011103	Res, Chip	10kΩ	J 1/20W	
RX619	24011103	Res, Chip	10kΩ	J 1/20W	
RX622	24011102	Res, Chip	1kΩ	J 1/20W	
RX623	24011102	Res, Chip	1kΩ	J 1/20W	
RX624	24011102	Res, Chip	1kΩ	J 1/20W	
RX625	24011102	Res, Chip	1kΩ	J 1/20W	
- MISCELLANEOUS -					
JX03A	23969946	Tape			
M999B	23969946	Tape			
PX001	23368671	Plug	50P, 1mm		
PX005	23903048	Socket	FPC/FFC		
PX006	23368671	Plug	50P, 1mm		
ZX001	23103823	Filter	TEM2027D		
ZX002	23153492	Crystal	SG82C32M		
ZX003	23153491	Crystal	SG81C42M		
ZX004	23103823	Filter	TEM2027D		
ZX006	23904946	Photo Reciever	RPM-676CBR-S		
ZX202	23103823	Filter	TEM2027D		
ZX203	23103823	Filter	TEM2027D		
ZX204	23103823	Filter	TEM2027D		
ZX402	23103823	Filter	TEM2027D		
ZX403	23103823	Filter	TEM2027D		
ZX404	23103823	Filter	TEM2027D		
ZX602	23103823	Filter	TEM2027D		
ZX603	23103823	Filter	TEM2027D		
ZX604	23103823	Filter	TEM2027D		
■ U0031 23781071 PC Board Assy Video					
- INTEGRATED CIRCUITS -					
QB001	70129738	IC	PQ20VZ1U		
QB002	23906212	IC	LM2991SX		
QB003	A6030620	IC	TC7S04F		
QB004	23906217	IC	MAX4121CSA		
QB005	23906217	IC	MAX4121CSA		
QB006	23906217	IC	MAX4121CSA		
QB007	23906216	IC	MAX497CSE		
QB008	B0484924	IC	TC74HCT240AF		
QB009	A6030620	IC	TC7S04F		
QB010	A6030630	IC	TC7S08F		
QB011	23906215	IC	M52348FP		
QB012	23906214	IC	M52347FP		
QB019	A6030630	IC	TC7S08F		
QB020	A6030630	IC	TC7S08F		
QB024	23905532	IC	M52320SP		
QB025	23905091	IC	CXA1315M		
QL001	70200127	IC	UPD4721GS		
QV001	23906213	IC	CXA1855Q		
QV002	B0410688	IC	TC9090AN		
QV003	70128490	IC	MM1031M		
QV005	23905459	IC	TDA9141		
QV006	23905460	IC	TDA4665T		
QV007	23905462	IC	TDA4672		
QV008	23905461	IC	TDA4780		
QV045	23905091	IC	CXA1315M		
QV050	70129738	IC	PQ20VZ1U		
QV051	70129738	IC	PQ20VZ1U		
QV052	70129738	IC	PQ20VZ1U		
QV053	70129738	IC	PQ20VZ1U		
QV054	70129738	IC	PQ20VZ1U		
QV055	70129738	IC	PQ20VZ1U		

LOCATION NUMBER	PART NUMBER	DESCRIPTION	
QV056	A6030620	IC	TC7S04F
QV057	23906234	IC	M62320FP
QV058	A6030620	IC	TC7S04F
- TRANSISTORS -			
QA07	A6335470	Transistor, Chip	2SC2712-Y
QA08	A6004020	Transistor, Chip	RN1402
QB013	A6335470	Transistor, Chip	2SC2712-Y
QB014	A6335470	Transistor, Chip	2SC2712-Y
QB015	23314062	Transistor	2SC3356-T2B
QB016	23314062	Transistor	2SC3356-T2B
QB017	23314062	Transistor	2SC3356-T2B
QB026	A6004020	Transistor, Chip	RN1402
QB027	A6004020	Transistor, Chip	RN1402
QB028	A6004020	Transistor, Chip	RN1402
QB029	A6004020	Transistor, Chip	RN1402
QB030	23314062	Transistor	2SC3356-T2B
QB031	23314062	Transistor	2SC3356-T2B
QB032	23314062	Transistor	2SC3356-T2B
QV013	A6365620	Transistor, Chip	2SC4116-Y
QV014	A6365620	Transistor, Chip	2SC4116-Y
QV015	A6365620	Transistor, Chip	2SC4116-Y
QV016	A6365620	Transistor, Chip	2SC4116-Y
QV017	A6365620	Transistor, Chip	2SC4116-Y
QV018	A6549570	Transistor, Chip	2SA1586-Y
QV019	A6365620	Transistor, Chip	2SC4116-Y
QV020	A6549570	Transistor, Chip	2SA1586-Y
QV021	A6365620	Transistor, Chip	2SC4116-Y
QV022	A6365620	Transistor, Chip	2SC4116-Y
QV023	A6365620	Transistor, Chip	2SC4116-Y
QV024	A6365620	Transistor, Chip	2SC4116-Y
QV025	A6365620	Transistor, Chip	2SC4116-Y
QV026	A6365620	Transistor, Chip	2SC4116-Y
QV027	A6365620	Transistor, Chip	2SC4116-Y
QV028	A6365620	Transistor, Chip	2SC4116-Y
QV029	A6365620	Transistor, Chip	2SC4116-Y
QV030	A6549570	Transistor, Chip	2SA1586-Y
QV031	A6365620	Transistor, Chip	2SC4116-Y
QV041	A6365620	Transistor, Chip	2SC4116-Y
QV042	A6365620	Transistor, Chip	2SC4116-Y
QV059	A6365620	Transistor, Chip	2SC4116-Y
QV060	A6365620	Transistor, Chip	2SC4116-Y
- DIODES -			
DB001	A7150800	Diode, Chip	1SS187
DB002	23118315	Diode, Zener	RD2. 0M-T1BB
DB003	A7152775	Diode, Chip	1SS226
DB004	A7152775	Diode, Chip	1SS226
DB005	A7152775	Diode, Chip	1SS226
DB006	23118313	Diode, Chip	RD6. 2M
DB007	23118313	Diode, Chip	RD6. 2M
DB008	23118313	Diode, Chip	RD6. 2M
DB009	23118313	Diode, Chip	RD6. 2M
DB010	23118313	Diode, Chip	RD6. 2M
DB011	A7152775	Diode, Chip	1SS226
DB012	A7152775	Diode, Chip	1SS226
DB013	A7152775	Diode, Chip	1SS226
DB014	23118313	Diode, Chip	RD6. 2M
DB015	23118313	Diode, Chip	RD6. 2M
DB016	A7150800	Diode, Chip	1SS187
DB017	A7150800	Diode, Chip	1SS187
DB018	23118287	Diode, Chip	RD12M
DB019	23118313	Diode, Chip	RD6. 2M
DB020	23118313	Diode, Chip	RD6. 2M
DB021	23118313	Diode, Chip	RD6. 2M
DB022	23118313	Diode, Chip	RD6. 2M
DL001	23118313	Diode, Chip	RD6. 2M
DL002	23118293	Diode, Zener	RD10MB2
DL003	23118293	Diode, Zener	RD10MB2
DL004	23118293	Diode, Zener	RD10MB2
DL005	23118293	Diode, Zener	RD10MB2
DL006	23118293	Diode, Zener	RD10MB2
DL007	23118293	Diode, Zener	RD10MB2
DL008	23118293	Diode, Zener	RD10MB2
DL009	23118293	Diode, Zener	RD10MB2
DV001	23118287	Diode, Chip	RD12M
DV002	23118287	Diode, Chip	RD12M

LOCATION NUMBER	PART NUMBER	DESCRIPTION
DV003	23118287	Diode, Chip RD12M
DV004	23118293	Diode, Zener RD10MB2
DV005	23118307	Diode, Zener, Chip RD5. 1MB2
DV006	23118287	Diode, Chip RD12M
DV007	23118313	Diode, Chip RD6. 2M
DV008	23118313	Diode, Chip RD6. 2M
DV009	23118313	Diode, Chip RD6. 2M
DV010	23118313	Diode, Chip RD6. 2M
DV011	23118313	Diode, Chip RD6. 2M
DV012	23118313	Diode, Chip RD6. 2M
DV013	23118313	Diode, Chip RD6. 2M
DV014	23118313	Diode, Chip RD6. 2M
DV015	23118313	Diode, Chip RD6. 2M
DV016	23118287	Diode, Chip RD12M
DV017	23118281	Diode, Chip RD15MB2
DV018	23118313	Diode, Chip RD6. 2M
- COILS -		
LB001	23103880	Coil, Choke TEM2011Y
LB002	23103880	Coil, Choke TEM2011Y
LV001	23245839	Coil, Chip TRF4560CB
LV002	23245832	Coil, Chip TRF4150CB
LV003	23245835	Coil, Chip TRF4270CB
LV004	23245835	Coil, Chip TRF4270CB
LV005	23245828	Coil, Chip TRF46R8CB
LV006	23245835	Coil, Chip TRF4270CB
LV007	23245828	Coil, Chip TRF46R8CB
LV008	23245837	Coil, Chip TRF41R0CB
LV009	23245828	Coil, Chip TRF46R8CB
LV010	23245830	Coil, Chip TRF4100CB
- CAPACITORS -		
CA01	24619113	Cap, Chip 1 μ F M 50V
CA02	24619113	Cap, Chip 1 μ F M 50V
CA023	24092399	Cap, Chip 0. 1 μ F Z 16V
CA03	24619113	Cap, Chip 1 μ F M 50V
CA04	24619113	Cap, Chip 1 μ F M 50V
CA26	24619113	Cap, Chip 1 μ F M 50V
CB001	24619102	Cap, Chip 47 μ F M 16V
CB002	24088953	Cap, Chip 33 μ F M 16V
CB003	24619106	Cap, Chip 33 μ F M 25V
CB004	24088953	Cap, Chip 33 μ F M 16V
CB005	24092399	Cap, Chip 0. 1 μ F Z 16V
CB006	24619088	Cap, Electrolytic 10 μ F M 16V
CB007	24619088	Cap, Electrolytic 10 μ F M 16V
CB008	24619088	Cap, Electrolytic 10 μ F M 16V
CB009	24109102	Cap, Chip 1000pF K 50V
CB010	24092399	Cap, Chip 0. 1 μ F Z 16V
CB011	24109102	Cap, Chip 1000pF K 50V
CB012	24092399	Cap, Chip 0. 1 μ F Z 16V
CB013	24109102	Cap, Chip 1000pF K 50V
CB014	24092399	Cap, Chip 0. 1 μ F Z 16V
CB015	24109102	Cap, Chip 1000pF K 50V
CB016	24092399	Cap, Chip 0. 1 μ F Z 16V
CB017	24109102	Cap, Chip 1000pF K 50V
CB018	24092399	Cap, Chip 0. 1 μ F Z 16V
CB019	24109102	Cap, Chip 1000pF K 50V
CB020	24092399	Cap, Chip 0. 1 μ F Z 16V
CB024	24092399	Cap, Chip 0. 1 μ F Z 16V
CB025	24092399	Cap, Chip 0. 1 μ F Z 16V
CB026	24092399	Cap, Chip 0. 1 μ F Z 16V
CB027	24092399	Cap, Chip 0. 1 μ F Z 16V
CB028	24619102	Cap, Chip 47 μ F M 16V
CB029	24619102	Cap, Chip 47 μ F M 16V
CB030	24619100	Cap, Chip 10 μ F M 16V
CB031	24092399	Cap, Chip 0. 1 μ F Z 16V
CB032	24092399	Cap, Chip 0. 1 μ F Z 16V
CB037	24092399	Cap, Chip 0. 1 μ F Z 16V
CB038	24109103	Cap, Chip 0. 01 μ F K 25V
CB039	24619102	Cap, Chip 47 μ F M 16V
CB040	24109103	Cap, Chip 0. 01 μ F K 25V
CB041	24619102	Cap, Chip 47 μ F M 16V
CB042	24109103	Cap, Chip 0. 01 μ F K 25V
CB043	24619102	Cap, Chip 47 μ F M 16V
CB044	24619100	Cap, Chip 10 μ F M 16V
CB045	24109103	Cap, Chip 0. 01 μ F K 25V
CB046	24619100	Cap, Chip 10 μ F M 16V

LOCATION NUMBER	PART NUMBER	DESCRIPTION
CB047	24109103	Cap, Chip 0. 01 μ F K 25V
CB048	24619100	Cap, Chip 10 μ F M 16V
CB049	24109103	Cap, Chip 0. 01 μ F K 25V
CB050	24109103	Cap, Chip 0. 01 μ F K 25V
CB051	24619102	Cap, Chip 47 μ F M 16V
CB052	24109103	Cap, Chip 0. 01 μ F K 25V
CB053	24619102	Cap, Chip 47 μ F M 16V
CB054	24109103	Cap, Chip 0. 01 μ F K 25V
CB055	24619102	Cap, Chip 47 μ F M 16V
CB056	24109103	Cap, Chip 0. 01 μ F K 25V
CB057	24109103	Cap, Chip 0. 01 μ F K 25V
CB058	24109103	Cap, Chip 0. 01 μ F K 25V
CB059	24619102	Cap, Chip 47 μ F M 16V
CB060	24109103	Cap, Chip 0. 01 μ F K 25V
CB061	24109103	Cap, Chip 0. 01 μ F K 25V
CB062	24109103	Cap, Chip 0. 01 μ F K 25V
CB063	24109103	Cap, Chip 0. 01 μ F K 25V
CB065	24109103	Cap, Chip 0. 01 μ F K 25V
CB066	24619102	Cap, Chip 47 μ F M 16V
CB067	24109103	Cap, Chip 0. 01 μ F K 25V
CB068	24619102	Cap, Chip 47 μ F M 16V
CB069	24109103	Cap, Chip 0. 01 μ F K 25V
CB070	24619102	Cap, Chip 47 μ F M 16V
CB071	24109103	Cap, Chip 0. 01 μ F K 25V
CB072	24109103	Cap, Chip 0. 01 μ F K 25V
CB073	24619103	Cap, Chip 4. 7 μ F M 25V
CB074	24619103	Cap, Chip 4. 7 μ F M 25V
CB075	24619103	Cap, Chip 4. 7 μ F M 25V
CB076	24619103	Cap, Chip 4. 7 μ F M 25V
CB077	24619113	Cap, Chip 1 μ F M 50V
CB078	24619100	Cap, Chip 10 μ F M 16V
CB079	24108221	Cap, Chip 220pF J 50V
CB080	24105101	Cap, Chip 100pF J 50V
CB081	24619102	Cap, Chip 47 μ F M 16V
CB082	24109103	Cap, Chip 0. 01 μ F K 25V
CB083	24092399	Cap, Chip 0. 1 μ F Z 16V
CB084	24092399	Cap, Chip 0. 1 μ F Z 16V
CB085	24619103	Cap, Chip 4. 7 μ F M 25V
CB086	24619100	Cap, Chip 10 μ F M 16V
CB087	24619100	Cap, Chip 10 μ F M 16V
CB088	24109103	Cap, Chip 0. 01 μ F K 25V
CB089	24109103	Cap, Chip 0. 01 μ F K 25V
CB090	24619100	Cap, Chip 10 μ F M 16V
CB091	24109103	Cap, Chip 0. 01 μ F K 25V
CB092	24109103	Cap, Chip 0. 01 μ F K 25V
CB093	24619100	Cap, Chip 10 μ F M 16V
CB094	24109103	Cap, Chip 0. 01 μ F K 25V
CB095	24109103	Cap, Chip 0. 01 μ F K 25V
CB096	24109103	Cap, Chip 0. 01 μ F K 25V
CB097	24109103	Cap, Chip 0. 01 μ F K 25V
CB098	24619100	Cap, Chip 10 μ F M 16V
CB099	24109103	Cap, Chip 0. 01 μ F K 25V
CB100	24619100	Cap, Chip 10 μ F M 16V
CB101	24109103	Cap, Chip 0. 01 μ F K 25V
CB102	24619100	Cap, Chip 10 μ F M 16V
CB103	24109103	Cap, Chip 0. 01 μ F K 25V
CB104	24619141	Cap, Chip 2. 2 μ F M 50V
CB105	24619141	Cap, Chip 2. 2 μ F M 50V
CB106	24619141	Cap, Chip 2. 2 μ F M 50V
CB107	24109103	Cap, Chip 0. 01 μ F K 25V
CB108	24619102	Cap, Chip 47 μ F M 16V
CB109	24619100	Cap, Chip 10 μ F M 16V
CB110	24109103	Cap, Chip 0. 01 μ F K 25V
CB111	24619102	Cap, Chip 47 μ F M 16V
CB113	24619106	Cap, Chip 33 μ F M 25V
CL001	24092399	Cap, Chip 0. 1 μ F Z 16V
CL002	24619113	Cap, Chip 1 μ F M 50V
CL003	24619113	Cap, Chip 1 μ F M 50V
CL004	24619113	Cap, Chip 1 μ F M 50V
CL005	24619113	Cap, Chip 1 μ F M 50V
CL006	24619113	Cap, Chip 1 μ F M 50V
CV001	24619102	Cap, Chip 47 μ F M 16V
CV002	24619102	Cap, Chip 47 μ F M 16V
CV003	24109103	Cap, Chip 0. 01 μ F K 25V
CV004	24109103	Cap, Chip 0. 01 μ F K 25V

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
CV006	24619100	Cap, Chip	10 μ F	M 16V	CV082	24092399	Cap, Chip	0.1 μ F	Z 16V
CV007	24109103	Cap, Chip	0.01 μ F	K 25V	CV083	24092399	Cap, Chip	0.1 μ F	Z 16V
CV008	24105120	Cap, Chip	12pF	J 50V	CV084	24109103	Cap, Chip	0.01 μ F	K 25V
CV009	24105120	Cap, Chip	12pF	J 50V	CV085	24109103	Cap, Chip	0.01 μ F	K 25V
CV010	24619141	Cap, Chip	2.2 μ F	M 50V	CV086	24109103	Cap, Chip	0.01 μ F	K 25V
CV011	24619100	Cap, Chip	10 μ F	M 16V	CV087	24109103	Cap, Chip	0.01 μ F	K 25V
CV012	24105120	Cap, Chip	12pF	J 50V	CV088	24109103	Cap, Chip	0.01 μ F	K 25V
CV013	24105120	Cap, Chip	12pF	J 50V	CV089	24109103	Cap, Chip	0.01 μ F	K 25V
CV014	24109103	Cap, Chip	0.01 μ F	K 25V	CV090	24619100	Cap, Chip	10 μ F	M 16V
CV015	24109103	Cap, Chip	0.01 μ F	K 25V	CV091	24619113	Cap, Chip	1 μ F	M 50V
CV016	24092399	Cap, Chip	0.1 μ F	Z 16V	CV092	24092294	Cap, Chip	0.33 μ F	Z 16V
CV017	24105220	Cap, Chip	22 μ F	J 50V	CV093	24619113	Cap, Chip	1 μ F	M 50V
CV018	24105180	Cap, Chip	18pF	J 50V	CV094	24092399	Cap, Chip	0.1 μ F	Z 16V
CV019	24105100	Cap, Chip	10pF	J 50V	CV095	24092399	Cap, Chip	0.1 μ F	Z 16V
CV020	24109103	Cap, Chip	0.01 μ F	K 25V	CV096	24092399	Cap, Chip	0.1 μ F	Z 16V
CV021	24092399	Cap, Chip	0.1 μ F	Z 16V	CV097	24619100	Cap, Chip	10 μ F	M 16V
CV022	24619100	Cap, Chip	10 μ F	M 16V	CV098	24109103	Cap, Chip	0.01 μ F	K 25V
CV023	24619113	Cap, Chip	1 μ F	M 50V	CV111	24619102	Cap, Chip	47 μ F	M 16V
CV024	24109103	Cap, Chip	0.01 μ F	K 25V	CV112	24619100	Cap, Chip	10 μ F	M 16V
CV025	24092399	Cap, Chip	0.1 μ F	Z 16V	CV113	24619102	Cap, Chip	47 μ F	M 16V
CV026	24619100	Cap, Chip	10 μ F	M 16V	CV114	24109103	Cap, Chip	0.01 μ F	K 25V
CV027	24619102	Cap, Chip	47 μ F	M 16V	CV115	24109103	Cap, Chip	0.01 μ F	K 25V
CV028	24092399	Cap, Chip	0.1 μ F	Z 16V	CV125	24109103	Cap, Chip	0.01 μ F	K 25V
CV029	24619100	Cap, Chip	10 μ F	M 16V	CV126	24619100	Cap, Chip	10 μ F	M 16V
CV030	24105220	Cap, Chip	22 μ F	J 50V	CV127	24619102	Cap, Chip	47 μ F	M 16V
CV031	24092399	Cap, Chip	0.1 μ F	Z 16V	CV128	24109103	Cap, Chip	0.01 μ F	K 25V
CV032	24105390	Cap, Chip	39pF	J 50V	CV129	24088953	Cap, Chip	33 μ F	M 16V
CV033	24109103	Cap, Chip	0.01 μ F	K 25V	CV130	24109103	Cap, Chip	0.01 μ F	K 25V
CV034	24105181	Cap, Chip	180pF	J 50V	CV131	24619102	Cap, Chip	47 μ F	M 16V
CV035	24109103	Cap, Chip	0.01 μ F	K 25V	CV132	24109103	Cap, Chip	0.01 μ F	K 25V
CV036	24109103	Cap, Chip	0.01 μ F	K 25V	CV133	24088953	Cap, Chip	33 μ F	M 16V
CV037	24109103	Cap, Chip	0.01 μ F	K 25V	CV134	24109103	Cap, Chip	0.01 μ F	K 25V
CV038	24109103	Cap, Chip	0.01 μ F	K 25V	CV135	24619106	Cap, Chip	33 μ F	M 25V
CV039	24619100	Cap, Chip	10 μ F	M 16V	CV136	24109103	Cap, Chip	0.01 μ F	K 25V
CV040	24092399	Cap, Chip	0.1 μ F	Z 16V	CV137	24088978	Cap, Chip	22 μ F	M 20V
CV041	24109103	Cap, Chip	0.01 μ F	K 25V	CV138	24109103	Cap, Chip	0.01 μ F	K 25V
CV042	24619100	Cap, Chip	10 μ F	M 16V	CV139	24619102	Cap, Chip	47 μ F	M 16V
CV043	24092399	Cap, Chip	0.1 μ F	Z 16V	CV140	24109103	Cap, Chip	0.01 μ F	K 25V
CV044	24092399	Cap, Chip	0.1 μ F	Z 16V	CV141	24088953	Cap, Chip	33 μ F	M 16V
CV045	24092399	Cap, Chip	0.1 μ F	Z 16V	CV142	24109103	Cap, Chip	0.01 μ F	K 25V
CV046	24092399	Cap, Chip	0.1 μ F	Z 16V	CV143	24619102	Cap, Chip	47 μ F	M 16V
CV047	24092399	Cap, Chip	0.1 μ F	Z 16V	CV144	24109103	Cap, Chip	0.01 μ F	K 25V
CV048	24109103	Cap, Chip	0.01 μ F	K 25V	CV145	24088953	Cap, Chip	33 μ F	M 16V
CV049	24109103	Cap, Chip	0.01 μ F	K 25V	CV146	24109103	Cap, Chip	0.01 μ F	K 25V
CV050	24109103	Cap, Chip	0.01 μ F	K 25V	CV147	24619106	Cap, Chip	33 μ F	M 25V
CV051	24092399	Cap, Chip	0.1 μ F	Z 16V	CV148	24109103	Cap, Chip	0.01 μ F	K 25V
CV052	24619112	Cap, Chip	0.47 μ F	M 50V	CV149	24088978	Cap, Chip	22 μ F	M 20V
CV053	24815332	Cap, Chip	3300pF	K 50V	CV150	24109103	Cap, Chip	0.01 μ F	K 25V
CV054	24092399	Cap, Chip	0.1 μ F	Z 16V	CV151	24619100	Cap, Chip	10 μ F	M 16V
CV055	24092399	Cap, Chip	0.1 μ F	Z 16V	CV152	24109103	Cap, Chip	0.01 μ F	K 25V
CV056	24092399	Cap, Chip	0.1 μ F	Z 16V	CV153	24092399	Cap, Chip	0.1 μ F	Z 16V
CV057	24092399	Cap, Chip	0.1 μ F	Z 16V	CV154	24092399	Cap, Chip	0.1 μ F	Z 16V
CV058	24815332	Cap, Chip	3300pF	K 50V	CV155	24105101	Cap, Chip	100pF	J 50V
CV059	24105160	Cap, Chip	16pF	J 50V	- RESISTORS -				
CV060	24105130	Cap, Chip	13pF	J 50V	RA01	24011474	Res, Chip	470k Ω	J 1/20W
CV061	24092399	Cap, Chip	0.1 μ F	Z 16V	RA02	24011562	Res, Chip	5.6k Ω	J 1/20W
CV062	24105100	Cap, Chip	10pF	J 50V	RA03	24011474	Res, Chip	470k Ω	J 1/20W
CV063	24105181	Cap, Chip	180pF	J 50V	RA04	24011562	Res, Chip	5.6k Ω	J 1/20W
CV064	24109103	Cap, Chip	0.01 μ F	K 25V	RA05	24011474	Res, Chip	470k Ω	J 1/20W
CV065	24619100	Cap, Chip	10 μ F	M 16V	RA06	24011562	Res, Chip	5.6k Ω	J 1/20W
CV066	24109103	Cap, Chip	0.01 μ F	K 25V	RA07	24011474	Res, Chip	470k Ω	J 1/20W
CV067	24109103	Cap, Chip	0.01 μ F	K 25V	RA08	24011562	Res, Chip	5.6k Ω	J 1/20W
CV068	24619100	Cap, Chip	10 μ F	M 16V	RA35	24011332	Res, Chip	3.3k Ω	J 1/20W
CV069	24109103	Cap, Chip	0.01 μ F	K 25V	RA36	24011334	Res, Chip	330k Ω	J 1/20W
CV070	24109103	Cap, Chip	0.01 μ F	K 25V	RA37	24011100	Res, Chip	10 Ω	J 1/20W
CV071	24619100	Cap, Chip	10 μ F	M 16V	RA38	24011100	Res, Chip	10 Ω	J 1/20W
CV072	24092399	Cap, Chip	0.1 μ F	Z 16V	RA39	24011100	Res, Chip	10 Ω	J 1/20W
CV073	24092399	Cap, Chip	0.1 μ F	Z 16V	RA40	24011562	Res, Chip	5.6k Ω	J 1/20W
CV074	24092399	Cap, Chip	0.1 μ F	Z 16V	RB001	24000590	Res, Chip	3k Ω	F 1/16W
CV075	24092399	Cap, Chip	0.1 μ F	Z 16V	RB002	24000573	Res, Chip	1k Ω	F 1/16W
CV076	24092399	Cap, Chip	0.1 μ F	Z 16V	RB003	24000558	Res, Chip	750 Ω	F 1/16W
CV077	24092399	Cap, Chip	0.1 μ F	Z 16V	RB004	24000458	Res, Chip	240 Ω	F 1/16W
CV078	24109103	Cap, Chip	0.01 μ F	K 25V	RB005	24872471	Res, Chip	470 Ω	J 1/16W
CV079	24109103	Cap, Chip	0.01 μ F	K 25V	RB007	24872820	Res, Chip	82 Ω	J 1/16W
CV081	24100473	Cap, Chip	4700pF	Z 25V	RB008	24872820	Res, Chip	82 Ω	J 1/16W

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RB009	24872820	Res, Chip	82Ω	J 1/16W	RB102	24011103	Res, Chip	10kΩ	J 1/20W
RB010	24011103	Res, Chip	10kΩ	J 1/20W	RB105	24011103	Res, Chip	10kΩ	J 1/20W
RB011	24011103	Res, Chip	10kΩ	J 1/20W	RB108	24011101	Res, Chip	100Ω	J 1/20W
RB012	24011103	Res, Chip	10kΩ	J 1/20W	RB109	24011101	Res, Chip	100Ω	J 1/20W
RB013	24011103	Res, Chip	10kΩ	J 1/20W	RB110	24011101	Res, Chip	100Ω	J 1/20W
RB014	24011103	Res, Chip	10kΩ	J 1/20W	RB111	24011101	Res, Chip	100Ω	J 1/20W
RB015	24011103	Res, Chip	10kΩ	J 1/20W	RB112	24011101	Res, Chip	100Ω	J 1/20W
RB016	24011104	Res, Chip	100kΩ	J 1/20W	RB113	24011101	Res, Chip	100Ω	J 1/20W
RB017	24011104	Res, Chip	100kΩ	J 1/20W	RB114	24011101	Res, Chip	100Ω	J 1/20W
RB018	24011750	Res, Chip	75Ω	J 1/20W	RB115	24011101	Res, Chip	100Ω	J 1/20W
RB019	24011220	Res, Chip	22Ω	J 1/20W	RB116	24011101	Res, Chip	100Ω	J 1/20W
RB020	24011220	Res, Chip	22Ω	J 1/20W	RB117	24011101	Res, Chip	100Ω	J 1/20W
RB021	24011750	Res, Chip	75Ω	J 1/20W	RB118	24011101	Res, Chip	100Ω	J 1/20W
RB022	24011220	Res, Chip	22Ω	J 1/20W	RB119	24011221	Res, Chip	220Ω	J 1/20W
RB023	24011220	Res, Chip	22Ω	J 1/20W	RB120	24011221	Res, Chip	220Ω	J 1/20W
RB024	24011220	Res, Chip	22Ω	J 1/20W	RB121	24011223	Res, Chip	22kΩ	J 1/20W
RB025	24011750	Res, Chip	75Ω	J 1/20W	RB122	24011222	Res, Chip	2.2kΩ	J 1/20W
RB026	24011220	Res, Chip	22Ω	J 1/20W	RB123	24011222	Res, Chip	2.2kΩ	J 1/20W
RB027	24011220	Res, Chip	22Ω	J 1/20W	RB124	24011222	Res, Chip	2.2kΩ	J 1/20W
RB028	24011220	Res, Chip	22Ω	J 1/20W	RB125	24011103	Res, Chip	10kΩ	J 1/20W
RB029	24011220	Res, Chip	22Ω	J 1/20W	RB126	24011103	Res, Chip	10kΩ	J 1/20W
RB031	24872750	Res, Chip	75Ω	J 1/16W	RB127	24011103	Res, Chip	10kΩ	J 1/20W
RB032	24872750	Res, Chip	75Ω	J 1/16W	RB128	24872471	Res, Chip	470Ω	J 1/16W
RB033	24872750	Res, Chip	75Ω	J 1/16W	RB129	24011560	Res, Chip	56Ω	J 1/20W
RB034	24011151	Res, Chip	150Ω	J 1/20W	RB130	24872471	Res, Chip	470Ω	J 1/16W
RB035	24011220	Res, Chip	22Ω	J 1/20W	RB131	24011560	Res, Chip	56Ω	J 1/20W
RB038	24011220	Res, Chip	22Ω	J 1/20W	RB132	24872471	Res, Chip	470Ω	J 1/16W
RB041	24011220	Res, Chip	22Ω	J 1/20W	RB133	24011560	Res, Chip	56Ω	J 1/20W
RB044	24011223	Res, Chip	22kΩ	J 1/20W	RB134	24011222	Res, Chip	2.2kΩ	J 1/20W
RB046	24011101	Res, Chip	100Ω	J 1/20W	RB135	24011222	Res, Chip	2.2kΩ	J 1/20W
RB047	24011220	Res, Chip	22Ω	J 1/20W	RB136	24011222	Res, Chip	2.2kΩ	J 1/20W
RB048	24872221	Res, Chip	220Ω	J 1/16W	RB137	24872821	Res, Chip	820Ω	J 1/16W
RB049	24011220	Res, Chip	22Ω	J 1/20W	RB138	24872821	Res, Chip	820Ω	J 1/16W
RB050	24011220	Res, Chip	22Ω	J 1/20W	RB139	24872821	Res, Chip	820Ω	J 1/16W
RB051	24872221	Res, Chip	220Ω	J 1/16W	RL001	24011301	Res, Chip	300Ω	J 1/20W
RB052	24011220	Res, Chip	22Ω	J 1/20W	RL002	24011301	Res, Chip	300Ω	J 1/20W
RB053	24011220	Res, Chip	22Ω	J 1/20W	RV001	24011750	Res, Chip	75Ω	J 1/20W
RB054	24872221	Res, Chip	220Ω	J 1/16W	RV002	24011101	Res, Chip	100Ω	J 1/20W
RB055	24011220	Res, Chip	22Ω	J 1/20W	RV003	24011101	Res, Chip	100Ω	J 1/20W
RB056	24011330	Res, Chip	33Ω	J 1/20W	RV004	24011750	Res, Chip	75Ω	J 1/20W
RB059	24011221	Res, Chip	220Ω	J 1/20W	RV005	24011750	Res, Chip	75Ω	J 1/20W
RB060	24011103	Res, Chip	10kΩ	J 1/20W	RV013	24011101	Res, Chip	100Ω	J 1/20W
RB061	24011221	Res, Chip	220Ω	J 1/20W	RV014	24011101	Res, Chip	100Ω	J 1/20W
RB062	24011103	Res, Chip	10kΩ	J 1/20W	RV015	24011471	Res, Chip	470Ω	J 1/20W
RB063	24011183	Res, Chip	18kΩ	J 1/20W	RV016	24011152	Res, Chip	1.5kΩ	J 1/20W
RB064	24011222	Res, Chip	2.2kΩ	J 1/20W	RV017	24011101	Res, Chip	100Ω	J 1/20W
RB065	24011183	Res, Chip	18kΩ	J 1/20W	RV018	24011821	Res, Chip	820Ω	J 1/20W
RB066	24011222	Res, Chip	2.2kΩ	J 1/20W	RV019	24011471	Res, Chip	470Ω	J 1/20W
RB067	24011563	Res, Chip	56kΩ	J 1/20W	RV020	24011392	Res, Chip	3.9kΩ	J 1/20W
RB068	24000419	Res, Chip	4.3kΩ	F 1/16W	RV021	24011564	Res, Chip	560kΩ	J 1/20W
RB069	24000408	Res, Chip	43kΩ	F 1/16W	RV022	24011101	Res, Chip	100Ω	J 1/20W
RB070	24011101	Res, Chip	100Ω	J 1/20W	RV023	24011821	Res, Chip	820Ω	J 1/20W
RB071	24011101	Res, Chip	100Ω	J 1/20W	RV024	24011471	Res, Chip	470Ω	J 1/20W
RB072	24011101	Res, Chip	100Ω	J 1/20W	RV026	24011101	Res, Chip	100Ω	J 1/20W
RB074	24011101	Res, Chip	100Ω	J 1/20W	RV027	24011101	Res, Chip	100Ω	J 1/20W
RB075	24011101	Res, Chip	100Ω	J 1/20W	RV028	24011102	Res, Chip	1kΩ	J 1/20W
RB076	24011220	Res, Chip	22Ω	J 1/20W	RV029	24011821	Res, Chip	820Ω	J 1/20W
RB077	24011562	Res, Chip	5.6kΩ	J 1/20W	RV030	24011332	Res, Chip	3.3kΩ	J 1/20W
RB078	24011220	Res, Chip	22Ω	J 1/20W	RV031	24011332	Res, Chip	3.3kΩ	J 1/20W
RB079	24011562	Res, Chip	5.6kΩ	J 1/20W	RV032	24011822	Res, Chip	8.2kΩ	J 1/20W
RB080	24011220	Res, Chip	22Ω	J 1/20W	RV033	24011332	Res, Chip	3.3kΩ	J 1/20W
RB081	24011562	Res, Chip	5.6kΩ	J 1/20W	RV034	24011103	Res, Chip	10kΩ	J 1/20W
RB082	24011103	Res, Chip	10kΩ	J 1/20W	RV035	24011102	Res, Chip	1kΩ	J 1/20W
RB083	24011822	Res, Chip	8.2kΩ	J 1/20W	RV036	24011102	Res, Chip	1kΩ	J 1/20W
RB084	24011822	Res, Chip	8.2kΩ	J 1/20W	RV037	24011152	Res, Chip	1.5kΩ	J 1/20W
RB085	24011822	Res, Chip	8.2kΩ	J 1/20W	RV038	24011102	Res, Chip	1kΩ	J 1/20W
RB086	24011822	Res, Chip	8.2kΩ	J 1/20W	RV039	24011102	Res, Chip	1kΩ	J 1/20W
RB087	24011471	Res, Chip	470Ω	J 1/20W	RV040	24011152	Res, Chip	1.5kΩ	J 1/20W
RB089	24872821	Res, Chip	820Ω	J 1/16W	RV041	24011101	Res, Chip	100Ω	J 1/20W
RB091	24872821	Res, Chip	820Ω	J 1/16W	RV042	24011101	Res, Chip	100Ω	J 1/20W
RB093	24872821	Res, Chip	820Ω	J 1/16W	RV043	24011182	Res, Chip	1.8kΩ	J 1/20W
RB094	24011562	Res, Chip	5.6kΩ	J 1/20W	RV044	24011103	Res, Chip	10kΩ	J 1/20W
RB095	24011822	Res, Chip	8.2kΩ	J 1/20W	RV045	24011182	Res, Chip	1.8kΩ	J 1/20W
RB096	24011103	Res, Chip	10kΩ	J 1/20W	RV046	24011821	Res, Chip	820Ω	J 1/20W
RB099	24011103	Res, Chip	10kΩ	J 1/20W	RV047	24011271	Res, Chip	270Ω	J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
RV048	24011182	Res, Chip	1.8kΩ	J 1/20W	RV140	24000573	Res, Chip	1kΩ	F 1/16W
RV049	24011132	Res, Chip	1.3kΩ	J 1/20W	RV141	24000449	Res, Chip	6.2kΩ	F 1/16W
RV050	24011132	Res, Chip	1.3kΩ	J 1/20W	RV142	24000573	Res, Chip	1kΩ	F 1/16W
RV051	24011102	Res, Chip	1kΩ	J 1/20W	RV143	24000606	Res, Chip	8.2kΩ	F 1/16W
RV052	24011153	Res, Chip	15kΩ	J 1/20W	RV144	24000552	Res, Chip	390Ω	F 1/16W
RV053	24011101	Res, Chip	100Ω	J 1/20W	RV145	24000573	Res, Chip	1kΩ	F 1/16W
RV054	24011101	Res, Chip	100Ω	J 1/20W	RV146	24011472	Res, Chip	4.7kΩ	J 1/20W
RV055	24011823	Res, Chip	82kΩ	J 1/20W	RV147	24011101	Res, Chip	100Ω	J 1/20W
RV056	24011271	Res, Chip	270Ω	J 1/20W	RV150	24011101	Res, Chip	100Ω	J 1/20W
RV057	24011101	Res, Chip	100Ω	J 1/20W	RV151	24011101	Res, Chip	100Ω	J 1/20W
RV058	24011100	Res, Chip	10Ω	J 1/20W	RV152	24011101	Res, Chip	100Ω	J 1/20W
RV059	24011332	Res, Chip	3.3kΩ	J 1/20W	RV153	24011101	Res, Chip	100Ω	J 1/20W
RV060	24011152	Res, Chip	1.5kΩ	J 1/20W	RV154	24011101	Res, Chip	100Ω	J 1/20W
RV061	24011101	Res, Chip	100Ω	J 1/20W	RV155	24011101	Res, Chip	100Ω	J 1/20W
RV062	24011101	Res, Chip	100Ω	J 1/20W	RV156	24011101	Res, Chip	100Ω	J 1/20W
RV063	24011101	Res, Chip	100Ω	J 1/20W	RV157	24011101	Res, Chip	100Ω	J 1/20W
RV064	24011101	Res, Chip	100Ω	J 1/20W	RV158	24011101	Res, Chip	100Ω	J 1/20W
RV065	24011101	Res, Chip	100Ω	J 1/20W	RV159	24011101	Res, Chip	100Ω	J 1/20W
RV066	24011182	Res, Chip	1.8kΩ	J 1/20W	RV160	24011472	Res, Chip	4.7kΩ	J 1/20W
RV067	24011272	Res, Chip	2.7kΩ	J 1/20W	RV161	24011101	Res, Chip	100Ω	J 1/20W
RV068	24011102	Res, Chip	1kΩ	J 1/20W	RV163	24011472	Res, Chip	4.7kΩ	J 1/20W
RV069	24011102	Res, Chip	1kΩ	J 1/20W	RV164	24011472	Res, Chip	4.7kΩ	J 1/20W
RV070	24011392	Res, Chip	3.9kΩ	J 1/20W	RV165	24011472	Res, Chip	4.7kΩ	J 1/20W
RV071	24011102	Res, Chip	1kΩ	J 1/20W	RV166	24011472	Res, Chip	4.7kΩ	J 1/20W
RV072	24011100	Res, Chip	10Ω	J 1/20W	RV167	24011472	Res, Chip	4.7kΩ	J 1/20W
RV073	24011182	Res, Chip	1.8kΩ	J 1/20W	RV168	24011472	Res, Chip	4.7kΩ	J 1/20W
RV074	24011272	Res, Chip	2.7kΩ	J 1/20W	RV169	24011472	Res, Chip	4.7kΩ	J 1/20W
RV075	24011472	Res, Chip	4.7kΩ	J 1/20W	RV170	24011123	Res, Chip	12kΩ	J 1/20W
RV076	24011101	Res, Chip	100Ω	J 1/20W	RV171	24011392	Res, Chip	3.9kΩ	J 1/20W
RV077	24011182	Res, Chip	1.8kΩ	J 1/20W	RV172	24011101	Res, Chip	100Ω	J 1/20W
RV078	24011272	Res, Chip	2.7kΩ	J 1/20W	RV173	24011102	Res, Chip	1kΩ	J 1/20W
RV079	24011102	Res, Chip	1kΩ	J 1/20W	RV174	24011471	Res, Chip	470Ω	J 1/20W
RV080	24011102	Res, Chip	1kΩ	J 1/20W	RV175	24011821	Res, Chip	820Ω	J 1/20W
RV081	24011392	Res, Chip	3.9kΩ	J 1/20W	- MISCELLANEOUS -				
RV082	24011102	Res, Chip	1kΩ	J 1/20W	M999A	23969946	Tape		
RV083	24011100	Res, Chip	10Ω	J 1/20W	PV001	23903047	Socket	DSUB	
RV084	24011182	Res, Chip	1.8kΩ	J 1/20W	PV002	23903047	Socket	DSUB	
RV085	24011272	Res, Chip	2.7kΩ	J 1/20W	PV003	23365444	Earphone Jack		
RV086	24011472	Res, Chip	4.7kΩ	J 1/20W	PV004	23365684	Phono Jack	S-VHS, 4P	
RV087	24011331	Res, Chip	330Ω	J 1/20W	PV005	23365833	Phono Jack	3P	
RV088	24011331	Res, Chip	330Ω	J 1/20W	PV008	23164559	Plug	7P, 2.5mm	
RV089	24011561	Res, Chip	560Ω	J 1/20W	PV009	23903052	Socket	FPC/FFC	
RV090	24011222	Res, Chip	2.2kΩ	J 1/20W	PV010	23903046	Socket	1mm, 50P	
RV092	24011101	Res, Chip	100Ω	J 1/20W	PV012	23368672	Plug	26P	
RV093	24011392	Res, Chip	3.9kΩ	J 1/20W	PV013	23368241	Plug	13P	
RV094	24011392	Res, Chip	3.9kΩ	J 1/20W	SV001	70145484	Switch	SPVF11	
RV095	24011823	Res, Chip	82kΩ	J 1/20W	ZV001	23153961	Crystal	3.58MHz	
RV096	24011105	Res, Chip	1MΩ	J 1/20W	ZV002	23153471	Crystal	4.43MHz	
RV100	24011101	Res, Chip	100Ω	J 1/20W	ZV003	70132486	Filter	LPF	
RV101	24011101	Res, Chip	100Ω	J 1/20W	ZV004	70132486	Filter	LPF	
RV111	24011750	Res, Chip	75Ω	J 1/20W	ZV005	23103823	Filter	TEM2027D	
RV112	24011750	Res, Chip	75Ω	J 1/20W	ZV006	23103823	Filter	TEM2027D	
RV113	24011223	Res, Chip	22kΩ	J 1/20W	ZV011	23103823	Filter	TEM2027D	
RV114	24011153	Res, Chip	15kΩ	J 1/20W	ZV012	23103823	Filter	TEM2027D	
RV115	24011101	Res, Chip	100Ω	J 1/20W	■U0032	23781072	PC Board Assy	Audio	
RV116	24011272	Res, Chip	2.7kΩ	J 1/20W	- INTEGRATED CIRCUITS -				
RV118	24011223	Res, Chip	22kΩ	J 1/20W	QA01	23318752	IC	M5222FP	
RV119	24011223	Res, Chip	22kΩ	J 1/20W	QA02	23319944	IC	TDA7056A	
RV120	24011101	Res, Chip	100Ω	J 1/20W	- TRANSISTORS -				
RV121	24011272	Res, Chip	2.7kΩ	J 1/20W	QA03	A6335470	Transistor, Chip	2SC2712-Y	
RV125	24011153	Res, Chip	15kΩ	J 1/20W	QA04	A6335470	Transistor, Chip	2SC2712-Y	
RV126	24011153	Res, Chip	15kΩ	J 1/20W	QA05	A6004020	Transistor, Chip	RN1402	
RV127	24011153	Res, Chip	15kΩ	J 1/20W	QA06	A6004020	Transistor, Chip	RN1402	
RV128	24011153	Res, Chip	15kΩ	J 1/20W	- DIODES -				
RV129	24011101	Res, Chip	100Ω	J 1/20W	DA01	A7150800	Diode, Chip	1SS187	
RV130	24011101	Res, Chip	100Ω	J 1/20W	DA02	23118287	Diode, Chip	RD12M	
RV131	24000449	Res, Chip	6.2kΩ	F 1/16W	DA03	23118287	Diode, Chip	RD12M	
RV132	24000573	Res, Chip	1kΩ	F 1/16W	- CAPACITORS -				
RV133	24000417	Res, Chip	5.1kΩ	F 1/16W	CA11	24619100	Cap, Chip	10μF	M 16V
RV134	24000459	Res, Chip	270Ω	F 1/16W	CA12	24619100	Cap, Chip	10μF	M 16V
RV135	24000573	Res, Chip	1kΩ	F 1/16W	CA13	24619100	Cap, Chip	10μF	M 16V
RV136	24000606	Res, Chip	8.2kΩ	F 1/16W	CA14	24619100	Cap, Chip	10μF	M 16V
RV137	24000552	Res, Chip	390Ω	F 1/16W	CA15	24092399	Cap, Chip	0.1μF	Z 16V
RV138	24000573	Res, Chip	1kΩ	F 1/16W	CA16	24666471	Cap, Electrolytic	470μF	M 16V
RV139	24000590	Res, Chip	3kΩ	F 1/16W					

LOCATION NUMBER	PART NUMBER	DESCRIPTION			LOCATION NUMBER	PART NUMBER	DESCRIPTION		
CA17	24619100	Cap, Chip	10 μ F	M 16V	C1002	24666470	Cap, Electrolytic	47 μ F	M 16V
CA18	24109103	Cap, Chip	0.01 μ F	K 25V	C1003	24815473	Cap, Chip	0.047 μ F	K 50V
CA19	24109103	Cap, Chip	0.01 μ F	K 25V	C1004	24820392	Cap, Plastic	3900pF	J 630V
CA20	24092399	Cap, Chip	0.1 μ F	Z 16V	CM001	24619102	Cap, Chip	47 μ F	M 16V
CA21	24619100	Cap, Chip	10 μ F	M 16V	CM002	24092399	Cap, Chip	0.1 μ F	Z 16V
CA22	24619100	Cap, Chip	10 μ F	M 16V	CM003	24619102	Cap, Chip	47 μ F	M 16V
CA24	24092399	Cap, Chip	0.1 μ F	Z 16V	CM004	24092399	Cap, Chip	0.1 μ F	Z 16V
CA25	24092399	Cap, Chip	0.1 μ F	Z 16V	CM005	24619102	Cap, Chip	47 μ F	M 16V
		- RESISTORS -			CM007	24619102	Cap, Chip	47 μ F	M 16V
RA099	24366471	Res, Carbon	470 Ω	J 1/6W	CM008	24092399	Cap, Chip	0.1 μ F	Z 16V
RA11	24011473	Res, Chip	47k Ω	J 1/20W	CM010	24619100	Cap, Chip	10 μ F	M 16V
RA12	24011473	Res, Chip	47k Ω	J 1/20W	CM011	24619100	Cap, Chip	10 μ F	M 16V
RA13	24011223	Res, Chip	22k Ω	J 1/20W	CM012	24619141	Cap, Chip	2.2 μ F	M 50V
RA14	24011392	Res, Chip	3.9k Ω	J 1/20W	CM013	24092399	Cap, Chip	0.1 μ F	Z 16V
RA15	24011822	Res, Chip	8.2k Ω	J 1/20W	CM014	24665471	Cap, Electrolytic	470 μ F	M 10V
RA16	24011472	Res, Chip	4.7k Ω	J 1/20W	CM015	24092399	Cap, Chip	0.1 μ F	Z 16V
RA17	24011123	Res, Chip	12k Ω	J 1/20W	CM999	24591104	Cap, Plastic	0.1 μ F	J 50V
RA18	24011472	Res, Chip	4.7k Ω	J 1/20W			- RESISTORS -		
RA19	24011123	Res, Chip	12k Ω	J 1/20W	RI001	24011822	Res, Chip	8.2k Ω	J 1/20W
RA20	24011472	Res, Chip	4.7k Ω	J 1/20W	RI002	24011103	Res, Chip	10k Ω	J 1/20W
RA21	24011473	Res, Chip	47k Ω	J 1/20W	RI003	24011242	Res, Chip	2.4k Ω	J 1/20W
RA22	24011102	Res, Chip	1k Ω	J 1/20W	RI004	24011182	Res, Chip	1.8k Ω	J 1/20W
RA23	24011333	Res, Chip	33k Ω	J 1/20W	RI005	24011479	Res, Chip	4.7 Ω	J 1/20W
RA24	24011223	Res, Chip	22k Ω	J 1/20W	RI006	24011330	Res, Chip	33 Ω	J 1/20W
RA25	24000488	Res, Chip	3.9 Ω	J 1/2W	RI007	24011471	Res, Chip	470 Ω	J 1/20W
RA26	24000488	Res, Chip	3.9 Ω	J 1/2W	RI009	24019423	Posistor	PTH9M04BD471	
RA27	24011101	Res, Chip	100 Ω	J 1/20W	RI010	24011102	Res, Chip	1k Ω	J 1/20W
RA28	24011101	Res, Chip	100 Ω	J 1/20W	RM001	24011100	Res, Chip	10 Ω	J 1/20W
RA29	24011182	Res, Chip	1.8k Ω	J 1/20W	RM002	24011100	Res, Chip	10 Ω	J 1/20W
RA30	24011102	Res, Chip	1k Ω	J 1/20W	RM003	24011154	Res, Chip	150k Ω	J 1/20W
RA31	24011104	Res, Chip	100k Ω	J 1/20W	RM004	24011103	Res, Chip	10k Ω	J 1/20W
RA32	24011182	Res, Chip	1.8k Ω	J 1/20W	RM005	24011302	Res, Chip	3k Ω	J 1/20W
RA33	24011102	Res, Chip	1k Ω	J 1/20W	RM006	24011102	Res, Chip	1k Ω	J 1/20W
RA34	24011104	Res, Chip	100k Ω	J 1/20W	RM008	24011101	Res, Chip	100 Ω	J 1/20W
RA41	24011102	Res, Chip	1k Ω	J 1/20W	RM009	24011104	Res, Chip	100k Ω	J 1/20W
RA42	24011102	Res, Chip	1k Ω	J 1/20W	RM010	24011273	Res, Chip	27k Ω	J 1/20W
		- MISCELLANEOUS -			RM011	24011183	Res, Chip	18k Ω	J 1/20W
PV006	23365444	Earphone Jack			RM012	24011101	Res, Chip	100 Ω	J 1/20W
PV007	23901448	Connector			RM013	24011102	Res, Chip	1k Ω	J 1/20W
PV014	23902760	Socket	13P		RM014	24011102	Res, Chip	1k Ω	J 1/20W
QA02C	70391354	Screw	3x6mm		RM015	24011104	Res, Chip	100k Ω	J 1/20W
■U0041	23781073	PC Board Assy	Inverter, TLP511U/E		RM016	24011273	Res, Chip	27k Ω	J 1/20W
		- INTEGRATED CIRCUITS -			RM017	24011101	Res, Chip	100 Ω	J 1/20W
QM002	70129738	IC	PQ20V21U		RM018	24011153	Res, Chip	15k Ω	J 1/20W
QM007	70128490	IC	MM1031M		RM019	24011102	Res, Chip	1k Ω	J 1/20W
QM008	A6030620	IC	TC7S04F		RM020	24011153	Res, Chip	15k Ω	J 1/20W
		- TRANSISTORS -			RM021	24011682	Res, Chip	6.8k Ω	J 1/20W
QI001	A6014040	Transistor, Chip	RN2404		RM022	24011102	Res, Chip	1k Ω	J 1/20W
QI002	A6014040	Transistor, Chip	RN2404		RM023	24011122	Res, Chip	1.2k Ω	J 1/20W
QI003	23314142	Transistor	2SC3834		RM024	24011101	Res, Chip	100 Ω	J 1/20W
QM001	A6014040	Transistor, Chip	RN2404		RM025	24011222	Res, Chip	2.2k Ω	J 1/20W
QM003	A6335477	Transistor, Chip	2SC2712-Y		RM026	24011750	Res, Chip	75 Ω	J 1/20W
QM004	A6335477	Transistor, Chip	2SC2712-Y		RM027	24011104	Res, Chip	100k Ω	J 1/20W
QM005	A6335477	Transistor, Chip	2SC2712-Y		RM028	24011102	Res, Chip	1k Ω	J 1/20W
QM006	A6335477	Transistor, Chip	2SC2712-Y		RM029	24011334	Res, Chip	330k Ω	J 1/20W
		- DIODES -			RM999	24366101	Res, Carbon	100 Ω	J 1/6W
DI001	A7150800	Diode, Chip	1SS187				- MISCELLANEOUS -		
DI002	A7150800	Diode, Chip	1SS187		M555A	23969946	Tape		
DI003	23118317	Diode, Chip	RD2. 4M-T1BB		M666A	23969946	Tape		
DI004	23118317	Diode, Chip	RD2. 4M-T1BB		N4010	23969946	Tape		
DI005	A7150800	Diode, Chip	1SS187		PM001	23368673	Plug	26P	
DI006	23316725	Diode, Zener	MTZJ158		PM007	23363252	Phono Jack		
DM001	23118313	Diode, Chip	RD6. 2M		SM005	23145364	Switch, Slide	1C2P	
DM002	A7150800	Diode, Chip	1SS187		ZM001	23904946	Photo Reciever	RPM-676CBR-S	
DM003	A7150800	Diode, Chip	1SS187		ZM002	23103823	Filter	TEM2027D	
DM004	23118313	Diode, Chip	RD6. 2M		ZM003	23107622	Filter	TEM1018	
DM005	23118313	Diode, Chip	RD6. 2M						
		- COILS -			■U0042	23781074	PC Board Assy	SW, TLP511U/E	
LI001	23221746	Coil, Choke	TLN3155D				- MISCELLANEOUS -		
▲LI002	23217369	Power Transformer	TPW3382AD		SM001	23145226	Switch, Push	1C1P	
LM001	23103880	Coil, Choke	TEM2011Y		SM002	23145226	Switch, Push	1C1P	
LM002	23103880	Coil, Choke	TEM2011Y		SM003	23145226	Switch, Push	1C1P	
		- CAPACITORS -			SM004	23145226	Switch, Push	1C1P	
C1001	24666331	Cap, Electrolytic	330 μ F	M 16V	■U501	70186900	P C Board Assy	Camera Video, TLP511U/E	

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
- INTEGRATED CIRCUITS -					
Q103	70200150	IC CXD1267AN	C225	24100104	Cap, Chip 0.1 μ F Z 25V
Q201	70200663	IC HD49322BF	C227	24100104	Cap, Chip 0.1 μ F Z 25V
Q202	A6030893	IC TC7W32FU	C228	24100104	Cap, Chip 0.1 μ F Z 25V
Q203	70200423	IC HD49811TFA	C229	24088966	Chip, Cap, Tantalum 10 μ F M 4V
Q206	70128705	IC MM1024AF	C230	24088966	Chip, Cap, Tantalum 10 μ F M 4V
Q301	A6030629	IC TC7S04FU	C231	24088966	Chip, Cap, Tantalum 10 μ F M 4V
Q302	A6030791	IC TC7W74FU	C233	24088080	Cap, Chip 33 μ F M 10V
Q303S	70200606	IC 6473337PROG	C234	24088078	Cap, Chip 15 μ F M 6.3V
Q304	70200127	IC UPD4721GS	C235	24100104	Cap, Chip 0.1 μ F Z 25V
Q305	70200430	IC RN5VD27A	C236	24105220	Cap, Chip 22 μ F J 50V
Q306	70200429	IC AK93C65LV	C238	24109102	Cap, Chip 1000pF K 50V
Q801	B0370000	IC TA78L05F	C239	24109102	Cap, Chip 1000pF K 50V
Q802	70129738	IC PQ20VZ1U	C240	24100104	Cap, Chip 0.1 μ F Z 25V
Q803	70200328	IC PQ05SZ1U	C241	24088080	Cap, Chip 33 μ F M 10V
Q806	A6030629	IC TC7S04FU	C242	24100104	Cap, Chip 0.1 μ F Z 25V
- TRANSISTORS -			C243	24092441	Cap, Chip 1 μ F Z 16V
Q102	23314507	Transistor, Chip 2SC3931-C	C244	24619096	Cap, Chip 22 μ F M 6.3V
Q204	A6063920	Transistor, Chip 2SK880-Y	C245	24619098	Cap, Chip 100 μ F M 6.3V
Q205	A6549570	Transistor, Chip 2SA1586-Y	C246	24619098	Cap, Chip 100 μ F M 6.3V
Q307	23314351	Transistor, Chip XN6213	C247	24619096	Cap, Chip 22 μ F M 6.3V
Q308	23314351	Transistor, Chip XN6213	C248	24100104	Cap, Chip 0.1 μ F Z 25V
Q309	23314271	Transistor, Chip UN5213	C249	24100104	Cap, Chip 0.1 μ F Z 25V
Q804	23314888	Transistor, Chip UMZ1N	C301	24100104	Cap, Chip 0.1 μ F Z 25V
Q805	23314888	Transistor, Chip UMZ1N	C303	24100104	Cap, Chip 0.1 μ F Z 25V
- DIODES -			C305	24100104	Cap, Chip 0.1 μ F Z 25V
D101	23318041	Diode, Chip MA111	C307	24088080	Cap, Chip 33 μ F M 10V
D102	A7154050	Diode, Chip 1SS301	C314	24092441	Cap, Chip 1 μ F Z 16V
D103	23318041	Diode, Chip MA111	C315	24092441	Cap, Chip 1 μ F Z 16V
D201	23318255	Diode, Chip 1T363-T8-T04	C316	24092441	Cap, Chip 1 μ F Z 16V
D801	23316895	Diode, Zener DTZ8.2B	C318	24092441	Cap, Chip 1 μ F Z 16V
D802	23316915	Diode, Zener DTZ15C	C319	24092441	Cap, Chip 1 μ F Z 16V
D803	A7155540	Diode, Chip 1SS372	C320	24100104	Cap, Chip 0.1 μ F Z 25V
D804	A7154100	Diode, Chip 1SS302	C801	24092538	Cap, Chip 1 μ F Z 10V
- COILS -			C802	24100104	Cap, Chip 0.1 μ F Z 25V
L201	23245858	Coil, Chip TRF4100CC	C803	24100104	Cap, Chip 0.1 μ F Z 25V
L202	23245858	Coil, Chip TRF4100CC	C804	24100104	Cap, Chip 0.1 μ F Z 25V
L203	23245858	Coil, Chip TRF4100CC	C805	24088078	Cap, Chip 15 μ F M 6.3V
L204	23245858	Coil, Chip TRF4100CC	C806	24100104	Cap, Chip 0.1 μ F Z 25V
L205	23245858	Coil, Chip TRF4100CC	C807	24088964	Cap, Chip 4.7 μ F M 20V
L206	23245858	Coil, Chip TRF4100CC	C808	24088080	Cap, Chip 33 μ F M 10V
L302	23245858	Coil, Chip TRF4100CC	C809	24619100	Cap, Chip 10 μ F M 16V
L801	23245862	Coil, Chip TRF4221CC	C810	24619106	Cap, Chip 33 μ F M 25V
- CAPACITORS -			C811	24619100	Cap, Chip 10 μ F M 16V
C101	24100104	Cap, Chip 0.1 μ F Z 25V	C812	24619100	Cap, Chip 10 μ F M 16V
C102	24100104	Cap, Chip 0.1 μ F Z 25V	C813	24100104	Cap, Chip 0.1 μ F Z 25V
C103	24092538	Cap, Chip 1 μ F Z 10V	C814	24100104	Cap, Chip 0.1 μ F Z 25V
C104	24088080	Cap, Chip 33 μ F M 10V	- RESISTORS -		
C106	24109103	Cap, Chip 0.01 μ F K 25V	R101	24011105	Res, Chip 1M Ω J 1/20W
C107	24100104	Cap, Chip 0.1 μ F Z 25V	R102	24011104	Res, Chip 100k Ω J 1/20W
C108	24088082	Cap, Chip 1 μ F M 35V	R103	24011393	Res, Chip 39k Ω J 1/20W
C109	24100104	Cap, Chip 0.1 μ F Z 25V	R104	24011101	Res, Chip 100 Ω J 1/20W
C110	24100104	Cap, Chip 0.1 μ F Z 25V	R105	24011821	Res, Chip 820 Ω J 1/20W
C111	24100104	Cap, Chip 0.1 μ F Z 25V	R106	24011101	Res, Chip 100 Ω J 1/20W
C112	24100104	Cap, Chip 0.1 μ F Z 25V	R107	24011472	Res, Chip 4.7k Ω J 1/20W
C113	24100104	Cap, Chip 0.1 μ F Z 25V	R112	24011104	Res, Chip 100k Ω J 1/20W
C114	24100104	Cap, Chip 0.1 μ F Z 25V	R201	24011243	Res, Chip 24k Ω J 1/20W
C201	24092441	Cap, Chip 1 μ F Z 16V	R202	24011221	Res, Chip 220 Ω J 1/20W
C203	24100104	Cap, Chip 0.1 μ F Z 25V	R203	24011221	Res, Chip 220 Ω J 1/20W
C204	24100104	Cap, Chip 0.1 μ F Z 25V	R204	24011221	Res, Chip 220 Ω J 1/20W
C205	24100104	Cap, Chip 0.1 μ F Z 25V	R205	24011221	Res, Chip 220 Ω J 1/20W
C207	24088080	Cap, Chip 33 μ F M 10V	R206	24011331	Res, Chip 330 Ω J 1/20W
C208	24092538	Cap, Chip 1 μ F Z 10V	R207	24011102	Res, Chip 1k Ω J 1/20W
C209	24100104	Cap, Chip 0.1 μ F Z 25V	R208	24011102	Res, Chip 1k Ω J 1/20W
C210	24100104	Cap, Chip 0.1 μ F Z 25V	R209	24011102	Res, Chip 1k Ω J 1/20W
C215	24100104	Cap, Chip 0.1 μ F Z 25V	R211	24011101	Res, Chip 100 Ω J 1/20W
C216	24088078	Cap, Chip 15 μ F M 6.3V	R215	24011752	Res, Chip 7.5k Ω J 1/20W
C217	24100104	Cap, Chip 0.1 μ F Z 25V	R216	24011752	Res, Chip 7.5k Ω J 1/20W
C218	24100104	Cap, Chip 0.1 μ F Z 25V	R217	24000445	Res, Chip Jumper 0 Ω
C219	24100104	Cap, Chip 0.1 μ F Z 25V	R218	24000445	Res, Chip Jumper 0 Ω
C220	24100104	Cap, Chip 0.1 μ F Z 25V	R219	24011471	Res, Chip 470 Ω J 1/20W
C221	24088080	Cap, Chip 33 μ F M 10V	R220	24011105	Res, Chip 1M Ω J 1/20W
C222	24105220	Cap, Chip 22 μ F J 50V	R221	24011104	Res, Chip 100k Ω J 1/20W
C223	24105220	Cap, Chip 22 μ F J 50V	R222	24011472	Res, Chip 4.7k Ω J 1/20W
C224	24105220	Cap, Chip 22 μ F J 50V	R223	24011183	Res, Chip 18k Ω J 1/20W
			R224	24011101	Res, Chip 100 Ω J 1/20W

LOCATION NUMBER	PART NUMBER	DESCRIPTION
R225	24011102	Res, Chip 1k Ω J 1/20W
R227	24011102	Res, Chip 1k Ω J 1/20W
R228	24011472	Res, Chip 4.7k Ω J 1/20W
R229	24011102	Res, Chip 1k Ω J 1/20W
R230	24011102	Res, Chip 1k Ω J 1/20W
R231	24011182	Res, Chip 1.8k Ω J 1/20W
R232	24011105	Res, Chip 1M Ω J 1/20W
R233	24998750	Res, Chip 75k Ω D 1/16W
R234	24998750	Res, Chip 75k Ω D 1/16W
R235	24998750	Res, Chip 75k Ω D 1/16W
R236	24011222	Res, Chip 2.2k Ω J 1/20W
R305	24011331	Res, Chip 330 Ω J 1/20W
R308	24011101	Res, Chip 100 Ω J 1/20W
R309	24011105	Res, Chip 1M Ω J 1/20W
R313	24000445	Res, Chip Jumper 0 Ω
R314	24011474	Res, Chip 470k Ω J 1/20W
R315	24011472	Res, Chip 4.7k Ω J 1/20W
R801	24011162	Res, Chip 1.6k Ω J 1/20W
R802	24011102	Res, Chip 1k Ω J 1/20W
R803	24011101	Res, Chip 100 Ω J 1/20W
R804	24011471	Res, Chip 470 Ω J 1/20W
R805	24011103	Res, Chip 10k Ω J 1/20W
- MISCELLANEOUS -		
F801	70144823	Fuse, Chip 1A
Z201	70132524	Crystal FCX0-03, 28.5M
Z202	70132526	Crystal FCX-03, 17.7M
Z203	70132525	Filter BPF, 4.43M
Z204	70132523	Filter LPF, 7M
Z801	70131229	Coil, Chip HF50ACC3225T
Z802	70131229	Coil, Chip HF50ACC3225T

LOCATION NUMBER	PART NUMBER	DESCRIPTION
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SPECIFICATIONS

[Main Unit]

Power requirements	AC 100 – 240V 50/60Hz
Power consumption	TLP510: 205W
	TLP511: 210W
Mass	TLP510: 6.8 Kg
	TLP511: 8.2 Kg
Dimensions	TLP510: 340 x 138 x 295 (mm) (W/H/D) (Including the projecting sections)
	TLP511: 340 x 138 x 365 (mm) (W/H/D) (Including the projecting sections)
Ambient environment	Temperature: 0°C to 35°C Humidity: 30% to 70% RH
Lamp	UHP lamp 120W
Speaker	1.5W (monaural)
RGB inputs	RGB signal (D-sub 15-pin) Audio: 1V(p-p), more than 22k Ω , ϕ 3.5mm stereo mini jack
VIDEO inputs	S-video signal : Y input: 1V(p-p), 75 Ω , negative synchronization
	(Mini DIN 4-pin) C input: 0.286V(p-p) (burst signal), 75 Ω
	Video: 1V(p-p), 75 Ω , negative synchronization, pin jack
	Audio: 1V(p-p), more than 22k Ω , pin jacks (L, R)
Outputs	RGB signal (D-sub 15-pin)
	Audio: 1V(p-p), less than 2.2k Ω , ϕ 3.5mm stereo mini jack
CONTROL terminal	D-sub 9-pin (RS-232C)
Cabinet Material	ABS resin

[Liquid Crystal Display]

Projection system	3-pannels transmission
Panel size	1.3 inches
Driving system	TFT active matrix
Picture elements	786,432 (1024 x 768 dots) x 3

[Projection Lens]

Lens	Zooming lens F=2.5 – 3.0 f=50 – 70mm
Focusing	Manual operation
Zooming	Manual operation

[Document Imaging Camera]

Lens	F=1.8 – 2.3, f=5.8 – 17.4mm
Filming area	Max 290 (mm) horizontal, 217 (mm) vertical (WIDE)
Zoom	Motor-driven (Manual)
Focus	Motor-driven (Manual)
Iris	Auto/Lever adjustment allowed
TV signal	PAL
Image element	1/3 inch CCD
Total picture elements	480,000
Resolution	Horizontal 450, vertical 420
Lighting	4W fluorescent light
Output Terminal	Pin jack PAL signal

[Accessories]

Wireless remote control	1
AA size battery (TLP510U/511U)	2
R6 size battery (TLP510E/511E)	2
Power cord	1
RGB cable	1
Adapter for Macintosh computers	1
Audio/video cable	1
Lens cover	1 (Only the document imaging camera model)
Pad	1
Infrared remote sensor unit	1
IBM/MAC cable (for infrared remote sensor unit)	1
MAC cable (for infrared remote sensor unit)	1

The design and specifications are subject to change without notice.

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